

CATALOGUE OF A COLLECTION OF BIRDS MADE BY  
DOCTOR W. L. ABBOTT IN KASHMIR, BALTISTAN AND  
LADAK, WITH NOTES ON SOME OF THE SPECIES, AND  
A DESCRIPTION OF A NEW SPECIES OF CYANECULA.

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FOR several years past, the United States National Museum has been the recipient of valuable collections in various branches of natural history and ethnology, gathered by the patriotic American naturalist and explorer, Doctor W. L. Abbott, of Philadelphia, during his travels in various parts of the Old World. Mount Kilimanjaro and the lowlands of Taveta, East Africa, were the scenes of his first investigations, where for two years he was actively at work, and whence he sent to the Museum over a thousand bird skins and a large quantity of other material. He subsequently visited the Seychelles Archipelago in the early part of 1890, and other islands to the westward of that group during the latter half of 1892, pausing a short time in Madagascar on his way, and sending collections from time to time to the National Museum, as had been his custom. The collection of birds formed in the Seychelles and other islands in that vicinity has been studied by Mr. Ridgway, who has described some new species contained therein.<sup>1</sup> A more exhaustive account of the birds of this group by the same author is now in course of preparation and will doubtless soon be completed. The birds' eggs have been reported on by Major Bendire. Various obstacles have heretofore prevented a study of the birds of the African collections, but it is now thought probable that a thorough examination of these may be effected in the near future. Mr. True has already given a detailed account of the mammals.

Upon concluding his explorations in the Seychelles, Dr. Abbott visited Kashmir and Ladak, in northern India, and spent parts of the years 1891-1894 in travel and in the accumulation of material illustrating the natural history and ethnology of that region. In July, 1893, a journey

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<sup>1</sup>Proc. U. S. Nat. Mus., XVI, No. 953, pp. 597-600, Aug. 16, 1893; XVII, No. 1008, pp. 371-373, Nov. 15, 1894.

occupying over a year was undertaken from Ladak into Eastern Turkestan, and north to the Thian-Shan Mountains. Returning in the spring of 1894, he passed several months in the Tagdumbash Pamir.

Dr. Abbott has now returned to Madagascar, making his headquarters in a little-known part of that vast island, and his labors in this fascinating field will undoubtedly bring to light many interesting things.

The collections sent from the region embraced in the present paper—Kashmir, Baltistan and Ladak—number 746 well-prepared specimens, referable to 188 species, of which one, a *Cyanecula*, is apparently new. A number of the species are rare and of unusual interest, and the specimens, with a few unimportant exceptions, are accompanied with accurate data and notes on the colors of fading parts, measurements, etc. In view of this, it has been deemed worth while to present a complete catalogue of the collection, including the collector's notes on the labels of the specimens.

The localities visited by Dr. Abbott are in many instances those already well known through the work of Drs. Stoliczka, Scully, Major Biddulph, and others famous in Indian ornithology. A brief itinerary, as collated from the data accompanying his collection of birds, is here inserted.

The Vale of Kashmir was visited in the latter part of June, 1891, and the succeeding four months were passed there and in the immediate vicinity, with short excursions to the Lolab Valley, Nowboog Valley, the Pir Panjal range, Mount Montir, Srinagar, and Woolar Lake. In the early part of November the Sind Valley and Sonamarg were visited, and shortly after, Dras and the Dras Valley, where, after a short sojourn, Dr. Abbott proceeded to the Indus Valley in Baltistan, which was followed to Skardu, and the Shigar and Braldu valleys, at which latter place the whole month of December was spent. In January, 1892, Shigar Valley and Skardu, and Rondu in the Indus Valley, were revisited, and considerable time in February and March was passed at Haramosh. Rondu, Skardu, Gol, Khartaksho and Tarkuti, in the Indus Valley, were also visited in March, and Dras Valley and Sonamarg were revisited. Most of April was spent in the Vale of Kashmir, particularly at its western end, and collections were made in the Kaj Nag Mountains, Srinagar, Sopor, Woolar Lake, and Gunderbal. A large part of May and a few days of June were passed in the Vale of Kashmir and in the Nowboog Valley. The remainder of 1892 was passed among the islands northwest of Madagascar. In 1893 most of April, May and June were spent in or near the Vale of Kashmir, the Krishnagunga Valley and Mountains being visited: the latter half of June was spent at Sonamarg, Zogi-bul Pass, Dras, Kargil, Pashgam, Kharbu and Namika-la Pass, in Kashmir; and Khardong, Fotu-la Pass, Lamayuru, and Indus Valley, in Ladak. The first week of July was passed in Leh, when a short trip to Suget, Eastern Turkestan, was made, followed shortly by a return to Khardong. A few days were

spent in the Nubra Valley, journeying toward Sasser Pass, where a short pause was made. Another expedition to Eastern Turkestan here followed, lasting over a year, and the region under consideration was not again visited until September, 1894, when Dr. Abbott stopped a short while at Khardong on his way to the coast.

Many of the species contained in the Kashmir collections had been provisionally named by Mr. F. L. J. Boettcher,<sup>1</sup> upon receipt of the successive installments, and little has remained for me to do in such cases but to verify those identifications. Mr. W. E. Brooks has, at my request, been kind enough to examine a series of willow warblers and two or three other species, and verify or correct my identifications of the same, for which my thanks are due him.<sup>2</sup>

In the matter of classification, I have used, for the sake of convenience and to facilitate comparison, the sequence of families and species employed by Dr. Sharpe,<sup>3</sup> but, as will be observed, I have endeavored to adhere closely to the American Ornithologists Union's regulations regarding nomenclature, and have adopted several of Dr. Stejneger's "inconvenient discoveries."

#### Family VULTURIDÆ.

##### 1. GYPS HIMALAYENSIS, Hume.

Male, immature, Braldu Valley, Baltistan, December 25, 1891. "Bill greenish; irides light brown; length, 47 inches; extent, 108 inches; weight, 22 lbs."

#### Family FALCONIDÆ.

##### 2. ACCIPITER NISUS (Linnæus).

Female, adult, western Kashmir, July 3, 1891; 7,000 feet.

Male, immature, Lolab Valley, Kashmir, July 12, 1891.

Male, adult, Vale of Kashmir, August 13, 1891.

Male, immature, Shigar Valley, Baltistan, January 4, 1892; 8,000 feet.

"Bill leaden, black at tip; cere greenish yellow; feet orange, claws black; irides lemon yellow; length, 12½ inches."

Female, adult, Woota Valley, Kashmir, April 25, 1892.

Male, adult, Naj Marg, Kashmir, May 16, 1893.

##### 3. BUTEO PLUMIPES, Hodgson.

Male, adult, central Kashmir, September 22, 1891; 11,000 feet. "Bill black, becoming light leaden at base; cere yellowish green; feet greenish yellow, claws black; irides dirty white; length, 20¾ inches."

Male, adult, central Kashmir, September 24, 1891; 11,000 feet. "Bill black, becoming horn blue at base; edge of gape orange; feet yellow, claws black; irides light brown; weight, 1½ lbs."

<sup>1</sup>Mr. Boettcher was temporarily employed in the Department of Birds at the time.

<sup>2</sup>His notes, followed by the initials "W. E. B.", will be found under those species.

<sup>3</sup>Scientific Results of the Second Yarkand Mission: Aves.

The two specimens are not in the same plumage, the last being much darker above and below, with nearly uniform chocolate-brown thighs, and ferruginous breast.

#### 4. BUTEO FEROX (Gmelin).

Female, adult, central Kashmir, July 31, 1891; 13,000 feet. "Bill dark horn; feet and cere yellow; irides pale yellowish white; length,  $23\frac{1}{2}$ ; extent, 57 inches; weight,  $2\frac{1}{2}$  lbs."

Female, adult, Sind Valley, Kashmir, November 6, 1891; 6,000 feet. "Cere green; feet orange yellow; irides brownish gray; length,  $23\frac{1}{4}$  inches; weight,  $2\frac{1}{2}$  lbs."

The latter specimen is in the dark "*aquilinus*" plumage, but the under parts are nearly uniform, without whitish markings on the breast or neck.

#### 5. GYPAËTUS BARBATUS (Linnæus).

Female, adult, central Kashmir, October 2, 1891; 11,000 feet. "Upper mandible pale horn color, becoming black at tip; lower mandible leaden; irides straw color; toes dull leaden above; claws dark horn; length, 45 inches; extent, 109 inches; weight,  $13\frac{1}{2}$  lbs."

Female, adult, Braldu Valley, Baltistan, December 28, 1891. "Feet dull leaden; claws black; irides brownish gray; bill leaden; sclerotics orange red; length, 46 inches; extent, 106 inches; weight, 12 lbs."

#### 6. HALIÆTUS LEUCORYPHUS (Pallas).

Female, immature, Vale of Kashmir, Woolar Lake, September 6, 1891. "Feet dirty white; claws black; bill black; irides light brown; lower mandible bluish white at base; cere dark leaden blue; length, 31 inches; extent,  $78\frac{1}{2}$  inches; weight, 5 lbs. Abundant about this lake."

#### 7. MILVUS MELANOTIS, Temminck and Schlegel.

Female, immature, Vale of Kashmir, August 9, 1891. "Length,  $23\frac{1}{2}$  inches."

Female, immature, Vale of Kashmir, August 22, 1891; 6,000 feet. "Bill black; base of lower mandible bluish white; cere greenish yellow; feet greenish white; claws black; irides dark brown; length,  $25\frac{1}{4}$  inches."

Female, adult, central Kashmir, September 29, 1891; 11,000 feet. "Bill black, lower mandible greenish yellow at base; gape greenish yellow; feet pale greenish yellow, claws black; cere greenish yellow; irides light brown; length,  $24\frac{3}{4}$  inches."

Female, immature, Vale of Kashmir, October 27, 1891; 5,000 feet. "Length,  $23\frac{3}{4}$  inches."

#### 8. FALCO SUBBUTEC, Linnæus.

Female, immature, central Kashmir, September 22, 1891; 11,000 feet. "Bill bluish white at base, becoming black at tip; feet and orbital skin yellow; claws black; length,  $12\frac{3}{4}$  inches."

Female, immature, central Kashmir, September, 1891; 10,000 feet. "Upper mandible dark horn blue; base of lower mandible bluish white; feet yellow; cere green; irides dark brown."

Male, adult, Krishnagunga Valley, Kashmir, April 23, 1893; 6,500 feet. "Bill horn blue, black at tip; cere yellow; orbital skin yellow; irides dark brown; feet yellow, claws black; length,  $13\frac{1}{2}$  inches."

Female, adult, Krishnagunga Valley, Kashmir, April 23, 1893; 6,500 feet. "Bill horn blue, tip black; cere and orbital skin yellow; feet yellow, claws black; length, 14 inches; irides dark brown."

Male, adult, Lolab Valley, Kashmir, May 12, 1893; 6,000 feet. "Bill horn blue, black at tip, yellowish at base; feet yellow, claws black; cere and orbital skin greenish yellow; irides brown; length,  $12\frac{3}{4}$  inches."

#### 9. FALCO TINNUNCULUS, Linnæus.

Female, adult, central Kashmir, July 31, 1891; 13,000 feet. "Bill nearly white, becoming dark horn blue at tip; cere greenish yellow; legs orange."

Female, adult, central Kashmir, September 17, 1891; 11,000 feet. "Bill bluish white at base, becoming black at tip; feet orange yellow; length, 13 inches."

Female, adult, central Kashmir, September 22, 1891; 11,000 feet. "Bill light leaden blue at base, becoming black at tip; cere yellowish green; feet orange yellow; length,  $14\frac{1}{2}$  inches. Extremely fat."

Female, adult, central Kashmir, September 22, 1891; 11,000 feet. "Length, 14 inches."

Female, adult, central Kashmir, September 26, 1891; 11,000 feet. "Length,  $13\frac{3}{8}$  inches."

Female, adult, Vale of Kashmir, April 12, 1892; 5,200 feet. "Bill horn blue, blackening at tip; lower mandible yellowish at base; feet orange yellow, claws black; cere orange; irides dark brown; length,  $13\frac{1}{2}$  inches."

Male, adult, Kaj Nag Mountains, Kashmir, April 23, 1892; 8,000 feet. "Bill horn blue, black at tip; cere orange yellow; feet orange yellow; claws black; irides dark brown; length,  $13\frac{1}{2}$  inches."

Female, adult, Leh, Ladak, July 2, 1893; 11,500 feet. "Bill horn yellow, black at tip; cere yellow; irides dark brown; feet dirty orange, claws black; length,  $13\frac{3}{4}$  inches."

#### Family BUBONIDÆ.

#### 10. BUBO BUBO TURCOMANUS (Eversmann).

Adult, Vale of Kashmir, winter, 1891-'92.

Female, adult, Khardong, Ladak, September 1, 1894; 12,000 feet. "Length, 27 inches."

This form has been recorded from northern India on several occasions, and I have little hesitancy in referring the above-mentioned specimens to it. They show the characters advanced for *B. b. turcomanus* very

clearly, and on this account I do not consider them to represent the pale form of the Eagle Owl described by Hume as *B. hemachalana*, which he avers is "of precisely the same type of coloration" as the Eagle Owl of Europe, but "very much paler." In *B. b. turcomanus* the pattern of coloration of the tail and wings particularly departs considerably from that of the typical Eagle Owl, but I do not consider the present bird to be specifically distinct from it, as advanced by some.

#### 11. ASIO ACCIPITRINUS (Pallas).

Male, adult, Shigar Valley, Baltistan, January 11, 1892; 8,000 feet. "Bill black, except extreme tip, which is white; claws black; irides golden yellow; length, 13½ inches."

#### 12. SYRNIUM ALUCO BIDDULPHI (Scully).

Female, adult, central Kashmir, September 30, 1891; 11,000 feet. "Length, 18¼ inches." Wing, 12.60 inches; tail, 8.20.

Female, adult, central Kashmir, October 10, 1891; 9,000 feet. "Length, 17¾ inches." Wing, 12.37 inches; tail, 8.60.

Female, adult, Nowboog Valley, eastern Kashmir, May 31, 1892; 7,000 feet. "Bill pale greenish; claws fleshy, black at tip; soles yellowish; irides brown." Wing, 12.82 inches; tail, 9.12.

If *S. a. biddulphi* is distinct from *Syrnium aluco nivicolum*, our specimens should be referred as above, but I am at present unable to satisfactorily determine its status, having at hand no specimens of *S. a. nivicolum* for comparison.

#### 13. CARINE NOCTUA BACTRIANA (Hutton).

Male, immature, Shyok River, below Sasser Pass, Ladak, July 22, 1893; 14,000 feet. "Bill yellowish green; cere wax brown; length, 9¼ inches."

Female, immature, Shyok River, below Sasser Pass, Ladak, July 22, 1893; 14,000 feet. "Bill yellowish green; cere wax brown; irides yellow; claws horn black; soles of feet yellow; length, 9¼ inches."

#### Family CORVIDÆ.

#### 14. CORVUS FRUGILEGUS, Linnæus.

Adult, Vale of Kashmir, winter of 1891-'92.

#### 15. CORVUS CORAX, Linnæus.

Male, adult, Shigar Valley, Baltistan, November 22, 1891; 8,000 feet. "Length, 26½ inches." Wing, 17.80 inches; tail, 10.40; tarsus, 2.75; culmen, 2.80.

Female, adult, Shigar Valley, Baltistan, November 22, 1891; 8,000 feet. "Length, 24 inches." Wing, 16.15 inches; tail, 10.25; tarsus, 2.60; culmen, 2.57.

Male, immature. Lamayurn, Ladak, June 27, 1893; 11,500 feet. "Bill and feet black; irides blackish brown; length, 27 inches. Common and very tame about the village, acting as scavengers." Wing, 17.80 inches; tail, 11.00; tarsus, 2.75; culmen, 2.87.

16. *CORVUS MONEDULA COLLARIS* (Drummond).

Male, adult, Kangam, Sind Valley, Kashmir, April 1, 1892; 6,000 feet. "Bill and feet black; irides white; length,  $14\frac{2}{3}$  inches."

Adult, Kangam, Sind Valley, Kashmir, April 1, 1892; 6,000 feet. "Bill and feet black; irides white; length,  $14\frac{2}{3}$  inches."

Female, immature, Vale of Kashmir, August 8, 1891.

Male, immature, Vale of Kashmir, August 9, 1891.

Male, immature, Vale of Kashmir, August 9, 1891. "Irides brownish gray."

17. *CORVUS SHARPII*, Oates.

Male, adult, Skardu, Baltistan, November 20, 1891; 7,000 feet. "Bill black; feet shining black; length,  $18\frac{3}{4}$  inches."

18. *CORVUS SPLENDENS*, Vieillot.

Male, adult, Srinagar, Kashmir, April 3, 1892. "Bill and feet black; irides dark brown; length, 17 inches."

Female, adult, Srinagar, Kashmir, April 4, 1892.

19. *CORVUS CORONE*, Linnæus.

Male, adult, Braldu Valley, Baltistan, December 23, 1891; 10,000 feet. "Length,  $21\frac{3}{4}$  inches."

Male, adult, Shigar Valley, Baltistan, January 4, 1892; 8,000 feet. "Bill and feet black; irides dark brown; length,  $19\frac{1}{2}$  inches."

20. *CORVUS MACRORHYNCHUS LEVAILLANTII* (Lesson).

Female, adult, western Kashmir, July 2, 1891; 7,000 feet.

Male, adult, western Kashmir, July 8, 1891; 8,000 feet.

Male, adult, central Kashmir, August 2, 1891; 12,000 feet. "Length,  $21\frac{1}{2}$  inches."

Male, immature, north slope of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet. "Length,  $20\frac{1}{2}$  inches."

Male, adult, Indus Valley, Kashmir, November 15, 1891; 9,000 feet. "Length, 21 inches."

Male, adult, Shigar Valley, Baltistan, November 23, 1891.

Female, adult, Shigar Valley, Baltistan, November 23, 1891; 8,000 feet.

Male, adult, Shigar Valley, Baltistan, January 14, 1892; 8,000 feet. "Bill and feet black; irides dark brown; length,  $21\frac{3}{4}$  inches."

Male, adult, Shigar Valley, Baltistan, January 14, 1892; 8,000 feet. "Bill and feet black; irides dark brown; length, 19 inches."

Male, adult, Haramosh, Baltistan, February 26, 1892; 7,000 feet. "Bill and feet black; irides dark brown; length, 21 inches."

This series represents only one form, apparently the one designated above. The birds are positively not *C. corone*, of which two specimens were sent, nor can they, owing to their large size, be *C. culminatus*.

*Measurements of Corvus macrorhynchus levaillantii (Lesson).*

U. S. N. M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Culmen.
				<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
125680	Female ad.	Western Kashmir.....	July 2	13.12	8.50	2.10	2.20
125681	Male ad.	.....do.....	July 8	13.60	9.30	2.27	2.32
125679	Male ad.	Central Kashmir.....	Aug. 2	13.90	9.75	2.19	2.35
125678	Male im.	Pir Panjal range, Kashmir.	Aug. 22	12.62	8.10	2.30	2.30
126864	Male ad.	Indus Valley, Kashmir...	Nov. 15	13.00	9.00	2.25	2.15
126860	Male ad.	Shigar Valley, Baltistan...	Nov. 23	13.50	9.10	2.17	2.30
126861	Female ad.	.....do.....	.....do.....	13.00	9.20	2.10	2.11
126865	Male ad.	.....do.....	Jan. 14	13.85	9.10	2.31	2.39
126863	Female ad.	.....do.....	.....do.....	12.75	8.55	2.08	2.08
126862	Male ad.	Haramosh, Baltistan.....	Feb. 26	13.30	9.00	2.18	2.31
		Average.....	.....	13.26	8.96	2.20	2.25

21. PICA PICA (Linnæus).

Male, adult, Dras, Kashmir, November 10, 1891; 10,000 feet. "Length, 20 $\frac{3}{8}$  inches. Not observed in Kashmir proper, but noticed as soon as we crossed to Ladak side of Zogi-bul Pass."

Adult, Indus Valley, Baltistan, November 18, 1891; 8,000 feet. "Bill and feet black; irides dark brown; length, 18 $\frac{3}{8}$  inches. Common about all the villages, and very tame."

Female, adult, Braldu Valley, Baltistan, December 26, 1891; 9,000 feet. "Length, 19 inches."

The Dras specimen is not at all typical, being, in fact, much nearer *P. p. leuconotos* than to the present form. The white on the primaries extends from within a half to a quarter of an inch of the tips of the feathers. The Indus Valley specimen is somewhat aberrant in having the three central pairs of rectrices conspicuously tipped with white!

22. UROCISSA FLAVIROSTRIS CUCULLATA (Gould).

Male, adult, Lolab Valley, Kashmir, July 10, 1891. "Bill yellow; feet orange."

Male, adult, Vale of Kashmir (western part), April 13, 1892. "Bill yellow; feet orange red; length, 22 $\frac{1}{4}$  inches."

Judging from descriptions alone, and having in mind Dr. Sharpe's comments on the bird, I believe this to be a good subspecies of *U. flavirostris*. The latter is said to be "very dark and gray in shade below"<sup>1</sup> in its typical state, while the form *U. f. cucullata* is described as

<sup>1</sup> Sharpe, Cat. Birds Brit. Mus., III, p. 73.



very pale, almost white, below. The case seems to be similar to one on our Mexican border, where the Green Jay, *Xanthoura luxuosa*, passes gradually into another form, *X. l. cyanocapilla*, in Guatemala and Honduras. The under parts vary from green in the first case, to bright yellow in the last.

### 23. NUCIFRAGA MULTIPUNCTATA, Gould.

Male, adult, western Kashmir, July 5, 1891; 9,000 feet.

Male, adult, western Kashmir, July 5, 1891; 9,000 feet.

Female, adult, western Kashmir, July 7, 1891; 8,000 feet.

Female, adult, Nowboog Valley, eastern Kashmir, August 16, 1891; 7,000 feet. "Length, 14½ inches."

Male, adult, Nowboog Valley, eastern Kashmir, August 16, 1891; 7,000 feet.

Male, adult, Nowboog Valley, eastern Kashmir, August 16, 1891; 7,000 feet. "Bill and feet black; irides dark brown; length, 14½ inches."

Male, adult, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet. "Length, 14½ inches."

Female, adult, Sind Valley, Kashmir, November 8, 1891; 9,000 feet. "Feeding on seeds from pine cones, when shot."

### 24. GRACULUS GRACULUS (Linnæus).

Female, adult, Pir Panjal range, Kashmir, August 27, 1891; 12,000 feet. "Bill and feet coral red; irides dark brown."

Female, adult, Sonamarg, Sind Valley, Kashmir, November 7, 1891; 8,500 feet. "Bill and feet deep red. Numerous in this marg, feeding on the wheat stubble in company with *Corvus macrorhynchus*."

Female, adult, Braldu Valley, Baltistan, November 24, 1891; 8,500 feet. "Bill and feet coral red; length, 16¼ inches."

Male, adult, Braldu Valley, Baltistan, December 23, 1891; 10,000 feet. "Bill and feet dark red; length, 17½ inches."

### 25. PYRRHOCORAX PYRRHOCORAX (Linnæus).

Female, adult, Indus Valley, Kashmir, November 14, 1891; 9,000 feet. "Bill yellow; irides dark brown; feet bright red. Very common in these barren mountains, in some localities."

Female, adult, Braldu Valley, Baltistan, January 3, 1892; 9,000 feet. "Bill yellow; feet bright red; irides dark brown: length, 15½ inches."

Male, adult, Shigar, Baltistan, January 24, 1892; 8,000 feet. "Bill yellow; feet red; irides dark brown: length, 15¾ inches."

## Family ORIOLIDÆ.

### 26. ORIOLUS KUNDOO, Sykes.

Male, adult, Vale of Kashmir, June 25, 1891.

Female, immature, Vale of Kashmir, June 25, 1891.

Immature, Vale of Kashmir, May, 1892.

Male, adult, Vale of Kashmir, May, 1892.

Male, adult, Lolab Valley, Kashmir, May 13, 1893; 6,000 feet.  
"Length,  $9\frac{3}{4}$  inches."

Family DICRURIDÆ.

27. DICRURUS ATER (Hermann).

Male, adult, Vale of Kashmir, June 25, 1891.

Female, adult, Vale of Kashmir, June 25, 1891.

Male, immature, Lolab Valley, Kashmir, July 10, 1891.

Female, adult, Vale of Kashmir, June 1, 1893. "Bill and feet black; irides red; length, 11 inches."

Family STURNIDÆ.

28. STURNUS HUMII, Brooks.

Male, adult, Vale of Kashmir, June 25, 1891.

Female, adult, Vale of Kashmir, June 25, 1891.

Female, immature, Vale of Kashmir, August 8, 1891.

Male, immature, three specimens, same locality and date as last.

Male, adult, Gunderbal, Vale of Kashmir, April 2, 1892. "Bill yellow, lower mandible gray at base; feet reddish brown; irides brown; length,  $8\frac{1}{2}$  inches."

Male, adult, Lolab Valley, Kashmir, May 11, 1893; 6,000 feet. "Bill yellow, base dirty white; feet reddish brown; irides reddish brown; length,  $8\frac{1}{8}$  inches."

29. ACRIDOTHERES TRISTIS (Linnæus).

Female, adult, Vale of Kashmir, June 22, 1891.

Female, immature, Vale of Kashmir, August 13, 1891.

Male, adult, eastern Kashmir, August 14, 1891; 6,000 feet. "Bill and feet yellow; lower mandible greenish; bare skin around eyes orange."

Family FRINGILLIDÆ.

30. PYCNORHAMPHUS ICTEROIDES (Vigors).

Male, adult, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet. "Bill green; feet pale flesh color; irides dark brown; length,  $9\frac{1}{4}$  inches."

Male, immature, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet. "Bill green; feet brownish flesh color; irides dark brown; length,  $8\frac{3}{4}$  inches."

Male, immature, central Kashmir, September 17, 1891; 10,000 feet.

Female, adult, western Kashmir, July 7, 1891; 8,000 feet. "Bill light green; feet pale."

Female, immature, western Kashmir, September 11, 1891; 9,000 feet.

The immature female differs from the adult chiefly in having a

brownish wash to the gray of the upper parts, middle pair of tail feathers, throat and breast, and in having the rump pale brownish buff like the abdomen.

31. *PYCNORHAMPHUS CARNEIPES* (Hodgson).

Female, adult, Braldu Valley, Baltistan, November 30, 1891; 11,000 feet. "Bill dark horn brown, blackening at tip; lower mandible pale at base; irides hair brown; length,  $9\frac{1}{2}$  inches. Shot in one of the few and small jungles to be found in this desolate region."

32. *CARDUELIS CARDUELIS CANICEPS* (Vigors)

Male, adult, four specimens, Vale of Kashmir, June, 1891, and May, 1892.

Female, immature, Vale of Kashmir, August 12, 1891.

33. *CALLACANTHIS BURTONI* (Gould).

Male, adult, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet. "Bill yellow; feet light brown; length, 7 inches."

Female, adult, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet. "Bill yellow; feet brownish flesh."

Male, adult, central Kashmir, September 13, 1891; 10,000 feet. "Bill orange yellow; feet brownish flesh. Common in the pine woods at this elevation, going about in flocks of ten or a dozen. Feed mostly upon the ground. Note resembles that of our American Goldfinch."

Male, immature, central Kashmir, September 13, 1891; 10,000 feet.

Female, adult, central Kashmir, September 13, 1891; 10,000 feet. "Bill horn yellow; feet dirty flesh color."

The immature male in the collection differs from the adult of that sex in having no trace of crimson in the plumage, and otherwise as follows: Top of head sepia, the feathers with concealed blackish bases, passing into wood brown on the nape and forehead; back brown (between raw umber and sepia), with a tinge of burnt umber on the scapulars; rump and upper tail-coverts raw umber; entire under parts dark cinnamon, lighter on abdomen, and with a tinge of russet on the throat; a russet band over the eye; lower part of cheeks, malar stripe and a line on each side of the throat dull blackish. Wing as in the adult, but white terminal spots on outer webs of tertials with a buffy edging; lesser wing-coverts brown; middle coverts with terminal buff spots to the feathers; tail as in the adult, with buffy edgings to the three central pairs of feathers instead of white tips.

34. *ACANTHIS CANNABINA FRINGILLIROSTRIS* (Bonaparte and Schlegel).

Male, adult, Shigar, Baltistan, January 24, 1892; 8,000 feet. "Upper mandible pale horn brown; lower mandible pale leaden, becoming yellowish at gonyes; irides brown; feet dark brownish flesh color; length, 6 inches."

## 35. MONTIFRINGILLA ADAMSI, Moore.

Male, adult, Fotu-la Pass, Ladak, June 27, 1893; 12,000 feet. "Bill and feet black; length,  $7\frac{1}{8}$  inches."

Male, adult, Fotu-la Pass, Ladak, June 27, 1893; 12,000 feet. "Bill and feet black; irides pale brown; length,  $6\frac{3}{4}$  inches."

Male, immature, Namika-la Pass, Kashmir, June 26, 1893; 11,000 feet. "Bill brownish yellow; feet dark fleshy brown; culmen dark brown; length,  $6\frac{1}{2}$  inches."

## 36. MONTIFRINGILLA SORDIDA (Stoliczka).

Male, adult, central Kashmir, July 26, 1891; 11,000 feet.

Female, adult, central Kashmir, July 28, 1891; 12,000 feet. "Bill dark horn brown; feet dark brown; irides light brown."

Female, adult, central Kashmir, July 29, 1891; 12,000 feet. "Upper mandible and feet dull dark brown; base of lower mandible light brown; irides light brown."

Female, adult, central Kashmir, July 29, 1891; 12,000 feet.

Female, adult, central Kashmir, July 29, 1891; 13,000 feet.

Male, immature, Sind Valley, Kashmir, November 8, 1891; 9,000 feet. "In great flocks in the Zogi-bul Pass (11,300 feet), leading into Ladak."

Female, immature, Braldu Valley, Baltistan, December 29, 1891; 9,000 feet. "Upper mandible dark horn brown; lower mandible pale; irides clear brown; feet dark fleshy brown; length,  $6\frac{1}{2}$  inches."

Male, adult, Haramosh, Baltistan, February 16, 1892; 5,500 feet. "Bill horn brown, pale at base; feet dark brown; irides orange brown; length,  $6\frac{1}{2}$  inches."

## 37. LEUCOSTICTE BRANDTI, Bonaparte.

Male, adult, Khardong, Ladak, June 14, 1893; 13,000 feet. "Bill and feet black; irides brown; length,  $7\frac{1}{2}$  inches."

Male, adult, Sasser Pass, Ladak, July 22, 1893; 16,000 feet. "Bill and feet black; irides brown; length,  $7\frac{1}{8}$  inches."

Female, adult, Sasser Pass, Ladak, July 22, 1893; 16,000 feet. "Bill and feet black; length,  $6\frac{7}{8}$  inches."

## 38. BUCANETES MONGOLICUS (Swinhoe.)

Male, adult, Shigar Valley, Baltistan, November 22, 1891; 7,500 feet.

Female, adult, Shigar Valley, Baltistan, November 22, 1891; 8,000 feet. "Length,  $5\frac{1}{2}$  inches."

## 39. PASSER DOMESTICUS INDICUS (Jardine and Selby).

Male, adult, Vale of Kashmir, August 9, 1891. Two specimens.

Female, adult, Vale of Kashmir, August 9, 1891.

Female, adult, Vale of Kashmir, August 12, 1891.

Male, adult, Vale of Kashmir, November 4, 1891; 5,000 feet.

Female, adult, Shigar Valley, Baltistan, January 13, 1892; 8,000 feet. "Feet brownish flesh; length, 6 inches; bill horn brown, yellowish at base."

Male, adult, Shigar, Baltistan, January 19, 1892; 8,000 feet. "Bill pale horn brown, becoming yellowish at gape; irides hair brown; length,  $6\frac{1}{4}$  inches."

Male, adult, Shigar, Baltistan, January 19, 1892; 8,000 feet. "Length,  $6\frac{1}{8}$  inches."

Male, adult, Shigar, Baltistan, January 19, 1892; 8,000 feet. "Length,  $6\frac{1}{4}$  inches."

Female, adult, Shigar, Baltistan, January 19, 1892; 8,000 feet. "Length, 6 inches."

#### 40 PASSER CINNAMOMEUS (Gould).

Male, adult, western Kashmir, July 7, 1891; 8,000 feet.

Male, adult, western Kashmir, July 6, 1891; 8,000 feet.

Male, adult, Baltal, Sind Valley, Kashmir, March 30, 1892; 9,000 feet. "Bill black; feet fleshy brown; irides brown; length,  $5\frac{3}{8}$  inches."

Male, adult, Baltal, Kashmir, March 30, 1892; 9,000 feet. "Bill black; feet brownish black; irides brown; length,  $5\frac{5}{8}$  inches."

Male, adult, Baltal, Kashmir, March 30, 1892; 9,000 feet. "Length,  $5\frac{1}{2}$  inches."

Male, adult, Bandipoor Nullah, Kashmir, July 14, 1891; 6,000 feet.

#### 41. METOPONIA PUSILLA (Pallas.)

Female, adult, Dras Valley, Kashmir, November 12, 1891; 9,000 feet.

Male, immature, Braldu Valley, Baltistan, November 24, 1891; 8,000 feet. "Bill and feet black; lower mandible slightly paler at base."

Male, adult, Braldu Valley, Baltistan, December 2, 1891; 11,000 feet. "Bill black, except base of lower mandible, which is pale brown; feet black."

Male, adult, Braldu Valley, Baltistan, December 2, 1891; 11,000 feet. "Bill black, except base of lower mandible, where pale; feet black; length,  $5\frac{1}{4}$  inches."

Male, immature, Braldu Valley, Baltistan, December 2, 1891; 11,000 feet. "Bill dark horn, except base of lower mandible, which is pale; length,  $4\frac{7}{8}$  inches."

Female, adult, Rondu, Baltistan, March 14, 1892; 6,500 feet. "Bill blackish horn; irides dark brown; feet black; length, 5 inches."

Male, adult, Rondu, Baltistan, March 14, 1892; 6,500 feet. "Bill and feet black; length,  $5\frac{1}{8}$  inches."

Male, adult, Rondu, Baltistan, March 14, 1892; 6,500 feet. "Bill horn black; feet black; irides dark brown; length, 5 inches."

Female, immature, Rondu, Baltistan, March 14, 1892; 6,500 feet. "Bill and feet black; length, 5 inches."

42. *CARPODACUS ERYTHRINUS* (Pallas).

Male, Krishnagunga Valley, Kashmir, May 7, 1893; 6,000 feet. "Bill dark horn brown; feet dark fleshy brown."

Male, adult, Dras, Kashmir, June 23, 1893; 10,000 feet. "Bill yellowish brown; feet dark brown."

Male, adult, Namika-la Pass, Kashmir, June 26, 1893; 11,000 feet. "Upper mandible dark horn brown; lower mandible paler brown; feet dark fleshy brown."

Male, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Bill pale horn brown; feet fleshy brown."

Male, adult, junction of Shyok and Nubra rivers, Ladak, July 16, 1893; 10,000 feet. "Bill dark horn brown, yellowish beneath; feet fleshy brown."

Male, immature, Nubra Valley, Ladak, July 17, 1893; 10,000 feet. "Bill dark horn brown, lower mandible paler; feet dark fleshy brown."

Female, adult, Shyok River, Ladak, July 15, 1893; 11,000 feet. "Bill horn brown; irides brown; feet reddish brown."

43. *CARPODACUS SEVERTZOVI*, Sharpe.

Male, adult, Nubra Valley, Ladak, July 18, 1893; 11,000 feet. "Upper mandible pale horn brown, lower mandible fleshy; irides brown; feet brownish black."

44. *CARPODACUS THURA*, Bonaparte and Schlegel.

Male, immature, central Kashmir, July 23, 1891; 11,000 feet.

I am not positive that this is typical *C. thura*: it agrees in a general way with descriptions of the female of that species, but differs enough to raise a doubt in my mind as to its proper place. Having no specimens of *C. thura* with which to compare it, and finding no description of the immature male, I am obliged to leave the matter unsettled. The specimen measures: Wing, 3.23 inches; tail, 2.82; tarsus, 0.89; culmen, 0.50.

45. *PYRRHOSPIZA LONGIROSTRIS*, Przevalsky.<sup>1</sup>

Male, adult, Khardong Pass, Ladak, July 14, 1893; 16,000 feet. "Upper mandible dark horn brown, lower mandible pale brownish flesh; feet brownish black; irides brown; length, 7½ inches." Wing, 4.48 inches; tail, 3.28; tarsus, 0.99; culmen, 0.65.

46. *PYRRHULA AURANTIACA*, Gould.

Male, adult, central Kashmir, July 22, 1891; 11,000 feet.

Male, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill black; feet brown; length, 5¾ inches."

<sup>1</sup> See a subsequent paper on Dr. Abbott's Turkestan collection in the present volume.

Male, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill black; feet brownish black; length,  $5\frac{5}{8}$  inches."

Female, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill black; feet fleshy brown; irides dark brown; length,  $5\frac{5}{8}$  inches."

Female, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill black; feet brownish; length,  $5\frac{3}{4}$  inches."

47. EMBERIZA FUCATA, Pallas.

Male, adult, Nowboog Valley, Kashmir, August 15, 1891; 7,000 feet.

Female, adult, Vale of Kashmir, north slope of Pir Panjal range, August 21, 1891; 7,000 feet.

Female, young; same locality, date and altitude.

Male, young, same locality, date, and altitude.

Male, adult, Vale of Kashmir (western end), May 11, 1893; 7,000 feet. "Upper mandible dark horn brown; lower mandible pale horn brown; feet pale fleshy brown; irides dark brown; length, 6 inches."

48. EMBERIZA CIA, Linnæus.

Male, immature, Braldu Valley, Baltistan, December 29, 1891; 9,000 feet. "Upper mandible dark horn brown, lower mandible leaden; legs pale fleshy; gape yellowish; irides dark brown; length, 7 inches."

Female, immature, Braldu Valley, Baltistan, December 29, 1891; 9,000 feet. "Feet pale flesh; length,  $6\frac{1}{2}$  inches."

Female, immature, Shigar Valley, Baltistan, January 13, 1892; 8,000 feet. "Feet brownish flesh; length,  $6\frac{1}{4}$  inches."

Female, immature, Skardu, Baltistan, January 27, 1892; 7,000 feet. "Feet flesh color, toes brownish; irides dark brown; length,  $6\frac{3}{4}$  inches."

Male, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet. "Upper mandible blackish horn, lower mandible leaden; feet pale fleshy brown; irides dark brown; length,  $6\frac{3}{8}$  inches."

From the dates of the specimens collected by Dr. Abbott this species would appear to be a winter visitant only in this region, as will doubtless prove to be the case. All of the summer specimens in the collection are referable to the form *E. c. stracheyi*.

49. EMBERIZA CIA STRACHEYI (Moore).

Male, adult, the Lolab, Kashmir, July 1, 1891.

Female, adult, the Lolab, Kashmir, July 9, 1891.

Male, adult, western Kashmir, July 2, 1891; 7,000 feet.

Male, young, Bandipoor Nullah, Kashmir, July 14, 1891; 6,000 feet.

Female, adult, Mount Montir, Kashmir, July 16, 1891; 10,000 feet.

Male, adult, Vale of Kashmir, August 14, 1891.

Male, young, Vale of Kashmir, August 14, 1891.

Male, adult, Nowboog Valley, eastern Kashmir, August 15, 1891; 7,000 feet. "Upper mandible, and tip of lower, black; base of lower mandible pale blue; feet brownish flesh color."

Young, eastern Kashmir, August 15, 1891; 7,000 feet.

Male, adult, eastern Kashmir, August 18, 1891; 6,000 feet.

Male, young, north side of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet.

Male, young, central Kashmir, September 20, 1891; 9,000 feet.

Male, adult, Sind Valley, Kashmir, November 6, 1891; 6,000 feet.

“Length, 6½ inches.”

#### 50. EMBERIZA STEWARTI, Blyth.

Male, adult, Indus Valley, Kashmir, November 15, 1891; 9,000 feet.

Male, adult, Vale of Kashmir, May 28, 1893. “Upper mandible dark horn brown; lower mandible leaden; feet brownish flesh.”

Male, adult, Vale of Kashmir, May 28, 1893. “Upper mandible dark horn brown; lower mandible leaden; feet brownish flesh; irides dark brown; length, 6 inches.”

#### 51. EMBERIZA LEUCOCEPHALA (Gmelin).

Female, adult, Sind Valley, Kashmir, November 6, 1891; 6,000 feet. “Upper mandible brownish black; lower mandible leaden blue; feet brownish flesh color; length, 7¼ inches.”

Female, immature, Sind Valley, Kashmir, November 6, 1891; 7,000 feet.

Female, adult, Sind Valley, Kashmir, November 7, 1891; 7,000 feet.

### Family ALAUDIDÆ.

#### 52. OTOCORIS LONGIROSTRIS, Moore.

Male, adult, central Kashmir, September 23, 1891; 11,000 feet. “Bill nearly black above; base of lower mandible bluish white; feet black, soles whitish; irides brown; length, 8½ inches.”

Male, adult, Namika-la Pass, Kashmir, June 26, 1893; 12,000 feet. “Bill horn black, base of lower mandible fleshy white; feet black, soles whitish; length, 8½ inches.”

Male, young, Khardong Pass, Ladak, July 13, 1893; 15,000 feet. “Bill dirty yellow, tip brown; feet pale brownish flesh color; irides brown; length, 7½ inches.”

#### 53. OTOCORIS PENICILLATA (Gould).

Male, adult, Skardu, Baltistan, January 28, 1892; 7,000 feet. “Bill horn black, base of lower mandible yellow; feet black; length, 7½ inches.”

#### 54. ALAUDA ARVENSIS CANTARELLA (Bonaparte).

Male, adult, Skardu, Baltistan, November 21, 1891; 7,000 feet. “Upper mandible black along culmen, rest of bill whitish; irides brown; tarsi reddish brown; toes brownish, claws dark brown; length, 7½ inches.”



Male, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet. "Bill yellowish, black along culmen; irides pale brown; feet brownish flesh length,  $7\frac{1}{4}$  inches."

55. *ALAUDA ARVENSIS INTERMEDIA* (Swinhoe).

Male, adult, Vale of Kashmir, June 27, 1891.

Male, adult, Vale of Kashmir, August 12, 1891.

Male, adult, Vale of Kashmir, October 27, 1891; 5,000 feet.

Adult, Vale of Kashmir, winter of 1891-'92.

Male, adult, Mount Montir, central Kashmir, July 16, 1891; 10,000 feet. Two specimens.

Male, adult, central Kashmir, September 23, 1891; 11,000 feet. "Upper mandible dark brown above, pale along commissure; lower mandible paler; feet pale brownish flesh color; length,  $6\frac{5}{8}$  inches."

Male, adult, Leh, Ladak, July 3, 1893; 11,500 feet. "Bill dark brown above, pale fleshy beneath; feet pale fleshy brown; length,  $6\frac{3}{4}$  inches."

Two of the above specimens (those taken September 23 and October 27), in fresh winter plumage, differ from the rest in possessing shorter and slenderer bills, but whether this is due to age, or represents a more northern form, I am unable to decide.

This is the *Alauda guttata* or *A. leipus* of authors. The name *leipus* of Hodgson, being a *nomen nudum*, can not be used, and the same applies to the *Alauda dulcivox* of the same author. *Alauda intermedia* of Swinhoe<sup>1</sup> is apparently the first available name for this bird, antedating the *Alauda guttata* of Brooks by about thirteen years. The name was originally applied to birds from Shanghai, but as near as I can ascertain, birds from Vladivostok are referable to the same form, and as we have specimens from the latter place, I have used them for comparison with the Kashmir birds, with which they appear to be identical.

In the event of the Kashmir birds proving distinct from those of the east of China, they should, of course, receive the name *guttata* of Brooks.

56. *CALANDRELLA TIBETANA*, Brooks.

Female, adult, Leh, Ladak, July 1, 1893; 11,000 feet. "Upper mandible dark horn brown; lower mandible dull yellow; irides brown; feet pale brown; length,  $5\frac{5}{8}$  inches."

Male, adult, Leh, Ladak, July 3, 1893; 11,500 feet. "Bill dark horn brown above, dirty yellow beneath; irides brown; feet pale fleshy brown, soles yellowish; length, 6 inches."

Male, adult, Leh, Ladak, July 3, 1893; 11,500 feet. "Bill dark horn brown above, dirty yellow beneath; feet pale fleshy brown, soles yellowish; length, 6 inches."

<sup>1</sup> Proc. Zool. Soc. London, 1863, p. 89.

## 57. GALERIDA CRISTATA BOYSII (Blyth).

Female, adult, Haramosh, Baltistan, February 16, 1892; 5,500 feet. "Upper mandible horn brown; lower mandible dirty white; irides pale brown; feet flesh color; length,  $6\frac{3}{4}$  inches." Wing, 3.75 inches; tail, 2.25; culmen, 0.63; tarsus, 0.95.

The name given above appears to be the correct one for the crested lark of northern India.

## Family MOTACILLIDÆ.

## 58. MOTACILLA PERSONATA, Gould.

Adult, Vale of Kashmir, winter of 1891-'92.

Female, adult, Haramosh, Baltistan, March 9, 1892; 5,000 feet. "Bill and feet black; irides dark brown; length,  $7\frac{3}{8}$  inches."

Female, adult, Skardu, Baltistan, March 17, 1892; 7,500 feet. "Bill and feet black; length,  $7\frac{3}{4}$  inches."

Male, adult, Skardu, Baltistan, March 18, 1892; 7,500 feet. "Bill and feet black; irides very dark brown; length,  $8\frac{3}{8}$  inches."

## 59. MOTACILLA HODGSONI, Blyth.

Male, adult, Bandipoor Nullah, Kashmir, July 14, 1891; 6,000 feet.

Male, young, Vale of Kashmir, August 25, 1891.

Female, adult, Vale of Kashmir, September 4, 1891.

Male, adult, Vale of Kashmir, October 28, 1891; 5,000 feet. "Bill and feet black; irides dark brown; length,  $8\frac{1}{4}$  inches."

Male, adult, Shigar Valley, Baltistan, November 23, 1891; 7,500 feet.

Male, adult, Tarkuti, Indus Valley, Baltistan, March 24, 1892; 8,600 feet. "Bill and feet black; irides dark brown; length, 8 inches."

Female, adult, Tarkuti, Indus Valley, Baltistan, March 24, 1892; 8,600 feet. "Bill and feet black; irides dark brown; length,  $7\frac{1}{2}$  inches."

## 60. MOTACILLA MELANOPE, Pallas.

Female, adult, western Kashmir, July 5, 1891; 7,000 feet.

Female, adult, central Kashmir, July 29, 1891; 11,000 feet. "Length, 7 inches."

Young, Pir Panjal range, Kashmir, August 27, 1891.

Male, immature, Indus Valley, Baltistan, November 18, 1891; 8,000 feet. "Length,  $7\frac{1}{2}$  inches."

Male, adult, Tarkuti, Indus Valley, Baltistan, March 24, 1892; 8,600 feet. "Bill horn black; feet fleshy brown; irides dark brown; length, 7 inches."

Male, adult, Sonamarg, Kashmir, March 31, 1892; 8,600 feet. "Bill black; feet dark fleshy brown; length,  $7\frac{1}{2}$  inches."

## 61. BUDYTES CITREOLOIDES, Gould.

Male, adult, Vale of Kashmir, June 22, 1891.

Female, immature, Vale of Kashmir, August 25, 1891.

Male, adult, Atchibal, Vale of Kashmir, May 26, 1892. "Bill and feet black; irides very dark brown; length,  $7\frac{1}{4}$  inches."

Male, adult, Vale of Kashmir, May 21, 1893. "Bill and feet black; irides dark brown; length, 7 inches."

Male, adult, Vale of Kashmir, June 3, 1893. "Bill and feet black."

Female, adult, Nowboog Valley, eastern Kashmir, August 16, 1891; 7,000 feet. "Irides brown; length,  $6\frac{1}{2}$  inches."

Male, adult, Nowboog Valley, eastern Kashmir, May 30, 1892; 6,500 feet. "Bill and feet black; length,  $7\frac{1}{4}$  inches."

Male, adult, Nowboog Valley, eastern Kashmir, May 30, 1892; 6,500 feet. "Bill and feet black; length, 7 inches."

Female, immature, Nubra Valley, Ladak, July 18, 1893; 11,000 feet. "Bill and feet black; irides dark brown; length,  $6\frac{3}{4}$  inches."

The adult female sent by Dr. Abbott agrees in general with Dr. Sharpe's description,<sup>1</sup> but has the crown and nape suffused with olive yellow, as is said to be the case in *B. citreola*. The specimen is in worn breeding plumage and will not admit of a satisfactory description.

The two immature females appear to be somewhat similar to males of the same age, but lack the streak of black on each side of the crown, and the black malar stripe and spots on lower throat are absent; the middle and greater wing-coverts are narrowly edged and broadly tipped with white; the secondaries and tertiaries are edged with grayish white; lores, broad superciliary line, and entire under parts whitish, with a very faint yellow tinge in places; axillaries and under wing-coverts dusky white. In one of the specimens, collected July 18, a feather on the breast is white on one web and yellow on the opposite one. It would appear from this that the yellow of the adult plumage is, to some extent at least, assumed by a change of color in the feathers.

## 62. ANTHUS TRIVIALIS (Linnæus).

Male, adult, central Kashmir, July 25, 1891; 11,000 feet.

Female, adult, central Kashmir, July 26, 1891; 11,000 feet.

Male, adult, central Kashmir, July 26, 1891; 11,000 feet.

Female, adult, central Kashmir, July 26, 1891; 11,000 feet.

Female, adult, central Kashmir, September 13, 1891; 10,000 feet.

Male, adult, central Kashmir, September 15, 1891; 10,000 feet.

"Length,  $6\frac{1}{2}$  inches. Common in small flocks in the alpine meadows."

Male, adult, Lolab, Kashmir, September 10, 1891; 8,000 feet. "Upper mandible dark brown; lower mandible pale flesh color; feet pale flesh color."

The four specimens obtained in July from central Kashmir are in breeding plumage, and are undoubtedly resident birds.

<sup>1</sup> Cat. Birds, Brit. Mus., X, p. 508.

## 63. ANTHUS SIMILIS, Jerdon.

Female, young, Vale of Kashmir, August 12, 1891. "Feet pale flesh color; upper mandible and tip of lower, dark brown; base of lower mandible flesh color; length, 8 inches."

Male, young, Vale of Kashmir, September 7, 1891. "Feet brownish flesh color."

Female, young, Vale of Kashmir, September 7, 1891. "Feet brownish flesh color; irides brown; upper mandible black; lower mandible flesh color at base, brown at tip; length,  $7\frac{7}{8}$  inches."

Male, adult, Vale of Kashmir, May 17, 1893; 5,500 feet. "Upper mandible brownish black; lower mandible flesh color; feet yellowish brown; length,  $8\frac{1}{2}$  inches."

## 64. ANTHUS ROSEATUS, Blyth.

Female, adult, central Kashmir, July 17, 1891; 11,000 feet.

Female, adult, central Kashmir, July 17, 1891; 10,000 feet.

Female, adult, central Kashmir, July 23, 1891; 11,000 feet. Three specimens.

Female, adult, central Kashmir, July 27, 1891; 12,000 feet.

Hodgson's name, *Anthus rosaceus* (or *roseaceus*?), for this bird, occurring in MS. and unpublished drawings deposited in the British Museum, can not be properly used, and the same name,<sup>1</sup> given by Gray, is likewise to be rejected. I have been unable in this connection to consult the original reference to Blyth's name,<sup>2</sup> and am not positive that a description is there given, but in the absence of any information to the contrary, think it well to adopt his name. In case Blyth's name be found to lack a clear title, that of *Anthus roseaceus*, Horsfield and Moore, may be used.

## Family CERTHIIDÆ.

## 65. CERTHIA HIMALAYANA, Vigors.

Female, adult, western Kashmir, July 7, 1891; 8,000 feet.

Female, immature, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet.

Male, immature, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Male, adult, Skardu, Baltistan, November 20, 1891; 7,000 feet. "Upper mandible dark horn brown; lower mandible pale flesh, except at tip; feet brownish flesh color; length,  $6\frac{5}{16}$  inches."

Female, adult, Shigar Valley, Baltistan, January 13, 1892; 8,000 feet. "Upper mandible almost black; lower mandible white at base, becoming brown at tip; feet brown; irides brown; length,  $6\frac{1}{2}$  inches."

Female, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet.

<sup>1</sup> Zoological Miscellany (1844); without description or plate.

<sup>2</sup> Journ. Asiat. Soc. Bengal, XVI, 1847, p. 437.

“Upper mandible black; lower mandible pale flesh; feet dark fleshy brown; length,  $5\frac{1}{2}$  inches.”

Female, adult, Kaj Nag Mountains, Kashmir, April 19, 1892; 9,000 feet. “Upper mandible very dark brown; lower mandible fleshy white; feet dark fleshy brown, soles pale; length,  $5\frac{3}{8}$  inches.”

66. *CERTHIA FAMILIARIS HODGSONI* (Brooks).

Female, adult, central Kashmir, July 22, 1891; 11,000 feet.

Male, adult, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet.

“Length,  $5\frac{3}{8}$  inches.”

Male, adult, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet.

Female, adult, Pir Panjal range, Kashmir, August 30, 1891; 8,000 feet.

Three of the examples here recorded are without the buffy spot on the fourth primary. The fourth, a male, has a small spot, but very much smaller than the one on the fifth primary.

67. *TICHODROMA MURARIA* (Linnæus).

Adult, Vale of Kashmir, winter of 1891-'92.

Male, adult, Indus Valley, Baltistan, November 18, 1891; 8,000 feet.

“Length,  $6\frac{1}{2}$  inches.”

Male, adult, Skardu, Baltistan, January 25, 1892; 7,000 feet. “Bill and feet black; irides brown; length,  $6\frac{1}{2}$  inches.”

Male, adult, Skardu, Baltistan, January 25, 1892; 7,000 feet. “Bill and feet black; irides brown; length,  $6\frac{1}{4}$  inches.”

Family SITTIDÆ.

68. *SITTA CASHMIRENSIS*, Brooks.

Female, adult, western Kashmir, July 3, 1891; 7,000 feet.

Male, adult, Vale of Kashmir, August 14, 1891.

Male, adult, Vale of Kashmir, August 15, 1891; 7,000 feet.

Male, adult, north slope of Pir Panjal range, Vale of Kashmir, August 21, 1891; 6,000 feet. “Length,  $5\frac{5}{8}$  inches.”

Male, adult, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Male, adult, Kaj Nag Mountains, Kashmir, April 23, 1892; 8,000 feet. “Bill black, lower mandible white at base; feet dark brown; irides dark brown; length,  $5\frac{1}{2}$  inches.”

Male, adult, Kaj Nag Mountains, Kashmir, April 25, 1892; 8,000 feet. “Bill black, lower mandible white at base; feet brown; irides brown; length,  $5\frac{1}{2}$  inches.”

69. *SITTA LEUCOPSIS*, Gould.

Male, adult, Mount Montir, Kashmir, July 16, 1891; 10,000 feet

Adult, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Female, adult, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Male, adult, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Male, adult, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Male, adult, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet.

“Bill and feet black: base of lower mandible white.”

### Family PARIDÆ.

#### 70. PARUS NIPALENSIS, Hodgson.

Female, young, north side of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet.

Female, adult, Vale of Kashmir, June 28, 1891.

Male, adult, Vale of Kashmir, June 29, 1891.

Male, young, Vale of Kashmir, August 24, 1891.

Male, adult, Sind Valley, Kashmir, November 5, 1891; 6,000 feet.

Female, adult, Sind Valley, Kashmir, November 6, 1891; 6,000 feet.

Male, adult, Skardu, Baltistan, November 20, 1891; 7,000 feet.

“Length, 6 inches.”

Male, adult, Braldu Valley, Baltistan, December 29, 1891; 9,000 feet.

“Bill black; legs leaden; irides dark brown; length, 6½ inches.”

#### 71. PARUS MONTICOLUS, Vigors.

Female, adult, western Kashmir, July 3, 1891; 7,000 feet.

Female, adult, Krishnagunga Valley, northwest Kashmir, May 5, 1893; 7,000 feet. “Bill black; feet leaden; irides dark brown; length, 4¾ inches.”

Female, adult, Krishnagunga Valley, northwest Kashmir, May 10, 1893; 7,000 feet. “Bill black; feet leaden; irides dark brown; length, 5½ inches. Was about to lay eggs.”

Male, adult, Krishnagunga Valley, Kashmir, May 10, 1893; 7,000 feet. “Bill black; feet leaden; length, 5 inches.”

#### 72. PARUS MELANOLOPHUS, Vigors.

Female, young, western Kashmir, July 2, 1891; 7,000 feet.

Female, adult, western Kashmir, July 3, 1891; 7,000 feet.

Female, adult, western Kashmir, July 6, 1891; 8,000 feet.

Male, adult, Indus Valley, above Rondu, Baltistan, January 30, 1892; 7,000 feet. “Bill black; feet leaden blue; irides brown; length, 4¼ inches.”

Female, adult, Indus Valley, above Rondu, Baltistan, January 30, 1892; 7,000 feet. “Bill black; feet leaden blue; irides brown; length, 4¼ inches.”

Male, adult, Indus Valley, above Rondu, Baltistan, January 29, 1892; 7,000 feet. “Bill black; feet leaden blue; irides brown; length, 4¾ inches.”

Male, adult, Haramosh, Baltistan, March 8, 1892; 9,000 feet. "Bill black; feet leaden blue; length,  $4\frac{1}{4}$  inches."

Male, adult, Kaj Nag Mountains, Kashmir, April 14, 1892; 7,000 feet. "Bill and feet black; length,  $4\frac{1}{4}$  inches."

### 73. PARUS RUFONUCHALIS, Blyth.

Female, adult, eastern Kashmir, August 15, 1891; 7,000 feet.

Female, adult, Pir Panjal range, Kashmir, August 31, 1891; 7,000 feet.

Female, adult, Baltal, Sind Valley, Kashmir, March 31, 1892; 9,000 feet. "Bill black, whitish at extreme tip; feet dark leaden blue; irides dark brown; length, 5 inches."

Male, adult, Kaj Nag Mountains, Kashmir, April 24, 1892; 10,000 feet. "Bill black; feet leaden blue; length, 5 inches."

Male, immature, Nowboog Valley, eastern Kashmir, May 29, 1892; 7,000 feet. "Bill black; feet leaden; irides dark brown; length,  $5\frac{1}{2}$  inches."

### 74. SYLVIPARUS MODESTUS, Burton.

Male, adult, north slope of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet.

### 75. ÆGITHALISCUS LEUCOGENYS (Moore).

Male, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet. "Bill black; feet orange brown; irides yellow; length,  $4\frac{5}{8}$  inches."

Male, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet. "Bill black; feet orange brown; irides yellow; length,  $4\frac{1}{2}$  inches."

Female, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet. "Bill black; feet orange brown; irides yellow; length,  $4\frac{1}{8}$  inches."

### 76. LEPTOPECILE SOPHIÆ, Severtzoff.

Male, adult, Braldu Valley, Baltistan, January 2, 1892; 9,000 feet. "Bill black; irides bright red; feet almost black; length,  $4\frac{3}{8}$  inches. Frequents low thickets; constantly on the move, uttering a low, soft cry."

Female, adult, Braldu Valley, Baltistan, January 2, 1892; 9,000 feet. "Bill and feet black; irides bright red; length,  $4\frac{1}{2}$  inches."

Female, adult, Haramosh, Baltistan, February 26, 1892; 7,000 feet. "Bill and feet black; irides bright red; length,  $4\frac{1}{2}$  inches."

## Family LANIIDÆ.

### 77. LANIUS ERYTHRONOTUS (Vigors).

Female, adult, June 22, 1891.

Female, adult, June 25, 1891.

Female, immature, August 24, 1891. "Irides dark brown; length,  $8\frac{3}{8}$  inches."

Female, immature, August 25, 1891.

Male, immature, August 25, 1891.

Immature, August 25, 1891.

Female, adult, April 11, 1892; 5,200 feet. "Bill and feet black; irides dark brown; length, 9 inches."

Female, adult, June 1, 1893. "Bill and feet black, soles pale; irides dark brown; length,  $8\frac{1}{4}$  inches."

All from Vale of Kashmir.

### Family SYLVIIDÆ.

#### 78. ACROCEPHALUS STENTORIUS (Hemprich).

Male, adult, Vale of Kashmir, May 25, 1892. "Tarsi brown; toes plumbeous; upper mandible black; lower mandible fleshy; irides pale brown; length, 8 inches."

Adult, Vale of Kashmir, May, 1892.

Female, adult, Dal Lake, Vale of Kashmir, May 25, 1893. "Irides pale brown; length,  $7\frac{1}{2}$  inches."

Male, adult, Dal Lake, Vale of Kashmir, May 25, 1893. "Feet dull leaden, soles pale; irides pale brown; length,  $7\frac{3}{4}$  inches."

Male, adult, Dal Lake, Vale of Kashmir, May 25, 1893. "Feet dull leaden, soles pale; upper mandible very dark horn brown; lower mandible flesh color; irides pale brown; length, 8 inches."

#### 79. TRIBURA MAJOR (Brooks).

Male, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill brownish black above, brownish flesh beneath; feet pale brownish flesh; irides clear brown; length,  $5\frac{3}{4}$  inches."

Male, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill blackish brown above, fleshy beneath; irides clear brown; length, 6 inches."

Female, adult, Nubra Valley, Ladak, July 18, 1893; 11,000 feet. "Bill black; feet pale flesh; irides pale brown; length,  $6\frac{1}{8}$  inches."

There is no apparent color difference between the sexes as represented in these specimens, except that in the female the under mandible is black. All of the specimens are conspicuously spotted on the chest, and in this feature differ strikingly from the colored figures accompanying Dr. Sharpe's "Aves" of the "Second Yarkand Mission."

#### 80. SYLVIA CURRUCA ALTHÆA (Hume).

Male, adult, Lolab Valley, Kashmir, July 10, 1891.

Male, adult, Lolab Valley, Kashmir, April 20, 1893. "Bill black, base of lower mandible leaden; feet dark fleshy brown; irides clear brown; length,  $5\frac{1}{4}$  inches."

Male, adult, Lolab Valley, Kashmir, May 12, 1893; 6,000 feet.



Male, adult, Nowboog Valley, eastern Kashmir, June 2, 1892; 7,000 feet. "Bill black, base of lower mandible plumbeous; feet brownish black; irides pale brown."

Female, adult, Vale of Kashmir, May 18, 1893; 6,000 feet. "Nest and eggs of this specimen taken."

Male, adult, Vale of Kashmir, June 1, 1893. "Feet dark slate, soles pale; irides pale brown; bill black, base of lower mandible leaden; length,  $5\frac{5}{8}$  inches."

Female, young, Shyok River, Ladak, July 15, 1893; 11,000 feet. "Feet leaden; irides gray; length,  $5\frac{5}{8}$  inches."

Female, young, Shyok River, Ladak, July 15, 1893; 11,000 feet. "Upper mandible brownish black; lower mandible fleshy; feet leaden; length,  $5\frac{5}{8}$  inches."

### 81. PHYLLOPSEUSTES AFFINIS (Tickell).

Male, adult, central Kashmir, July 27, 1891; 12,000 feet. Two specimens.

### 82. PHYLLOPSEUSTES TYTLERI (Brooks).

Female, adult, western Kashmir, July 2, 1891; 7,000 feet.

Male, adult, western Kashmir, July 6, 1891; 8,000 feet.

Mr. Brooks has verified my identification of these two specimens and notes that they are in faded summer plumage. I have no other specimens of this species for comparison, but from descriptions these birds seem to differ in their smaller size.

#### *Measurements of Phyllopseustes tytleri.*

U. S. N. M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Culmen.
				<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
125376	Female ad.	Western Kashmir...	July 2, 1891	2.10	1.45	0.71	0.41
125377	Male ad.	.....do.....	July 6, 1891	2.23	1.61	.70	.42

### 83. PHYLLOPSEUSTES TRISTIS (Blyth).

Male, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Upper mandible brownish black, lower mandible pale; feet black; length,  $4\frac{3}{4}$  inches."

Female, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Upper mandible blackish brown, lower mandible pale brown; feet very dark brown; length,  $4\frac{3}{4}$  inches."

Male, adult, Pashgam, Kashmir, June 25, 1893; 9,000 feet. "Bill black, base of lower mandible brownish yellow; feet black; soles pale; length,  $4\frac{3}{8}$  inches."

Female, adult, Indus Valley, Ladak, June 30, 1893; 11,000 feet. "Bill dark horn brown, base of lower mandible yellowish brown; feet dark brown; soles yellowish; irides dark brown; length,  $4\frac{1}{2}$  inches."

The four specimens here mentioned are very difficult to place, and with the aid of description alone it is almost impossible to correctly determine them. I have no specimens of *P. sindianus*, and only three examples of the present species for comparison with Dr. Abbott's birds. The latter differ from the descriptions of *P. tristis* in a number of points: *P. tristis* is said to have a tinge of green on the upper plumage, or rump, but there is no sign of it in any of these specimens (possibly on account of the season in which they were collected): in *P. tristis* the second primary is said to be equal to, or occasionally shorter than, the seventh; in all seven of the specimens before me the second is much shorter than the seventh, and equal to the eighth or ninth: in *P. tristis* the third and fourth primaries are said to be longest; in our specimens the third, fourth and fifth are longest. In some respects the birds seem to approach *P. neglectus* or *P. sindianus*; the greater size would bar them from *neglectus*, however, and the bend of the wing, under wing-coverts and axillaries are yellowish, thus apparently distinguishing them from *P. sindianus*.

Mr. Brooks corroborates my determination, and makes the following observations: "In Pleske's work on the Birds of Prjevalski's Journeys in Central Asia (*vide* Ibis, 1895, p. 287), it is stated that *P. tristis* var. *sindiana*, and *Reguloides superciliosus* var. *mandellii* are figured on Plate II. Certainly *P. sindiana* is no variety of *P. tristis*, the voices are so utterly different. *Tristis* is a 'chiffchaff;' *sindianus* is not, but a true willow warbler, with a call like that of *P. trochilus*, but much louder and shriller. *P. mandellii* I would rather class with *P. humii* than with *P. superciliosus*. Both these birds were supposed to be resident local species, but apparently they are both migratory. There is very little known about them."

*Measurements of Phylloscustes tristis.*

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Culmen.
				<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
150430	Male ad....	Zogi-bul Pass .....	June 20	2.30	2.00	0.81	0.36
150431	Female ad....	do .....	do .....	2.28	1.97	.76	.36
150432	Male ad....	Pashgam.....	June 25	2.20	1.85	.80	.34
150433	Female .....	Indus Valley.....	June 30	2.03	1.76	.70	.36

81. PHYLLOPSEUSTES HUMII (Brooks).

Male, adult, central Kashmir, July 23, 1891; 11,000 feet. Tail, 1.70 inches. "Faded summer bird." (W. E. B.)

Female, immature, northern slope of Pir Panjal range, Vale of Kashmir, August 21, 1891; 6,000 feet. Tail, 1.51 inches. "Apparently a young bird of the year." (W. E. B.)

Male, adult, western Kashmir, April 21, 1893; 6,000 feet. "Bill black, base of lower mandible pale; feet dark fleshy brown, soles yellowish; irides dark brown; length, 4¼ inches." "In good typical

spring dress; they go through their spring molt in February and March." (W. E. B.)

Female, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. Tail, 1.53 inches. "Bill brownish black, pale at base of lower mandible; feet dark brown; length, 4 inches." "In faded summer dress." (W. E. B.)

The first two specimens and the last I had classed as *P. superciliosus*, not having any well authenticated specimens of the present species for comparison, but Mr. Brooks has determined them to be *P. humii*; the April male is in good plumage and its identification was not difficult.

#### 85. PHYLLOPSEUSTES PROREGULUS (Pallas).

Female, adult, western Kashmir, July 3, 1891; 7,000 feet.

Male, immature, north side of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet.

Male, immature, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet. "Upper mandible black, lower one brown at base; feet brown; under side of toes yellow."

Male, immature, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet. "*P. humii* as far as I can make out, and probably a young bird of the year. It is not yellow enough about the head for *proregulus*, and the wing 'formula' appears to me to be that of *humii*." (W. E. B.)

Male, adult, Kaj Nag Mountains, Kashmir, April 17, 1892; 8,000 feet. "Upper mandible black; lower mandible yellow; feet dark fleshy brown, soles yellow; irides dark brown; length,  $3\frac{7}{8}$  inches."

Male, adult, Kaj Nag Mountains, Kashmir, April 23, 1892; 8,000 feet. "Upper mandible black; lower mandible yellowish; feet fleshy brown, soles yellowish; irides dark brown; length,  $3\frac{7}{8}$  inches."

Male, adult, Kaj Nag Mountains, Kashmir, April 23, 1892; 8,000 feet. "Feet fleshy brown; length, 4 inches."

Male, adult, Krishnagunga Valley, northwest Kashmir, May 5, 1893; 7,000 feet. "Feet fleshy brown, soles yellowish; length,  $3\frac{7}{8}$  inches."

In the series of willow warblers sent to Mr. Brooks, I failed to inclose more than one or two of the specimens of this species, and he labored under the disadvantage of having no other specimens of *P. proregulus* for comparison at the time he made the identification. He determined one of the immature males to be *P. humii*, as noted above; but the specimen is in unsatisfactory condition, and not well made up. The other immature birds, collected at the same place, are easily referable to *P. proregulus*; so I think this specimen should also be placed here. It seems almost too small for *P. humii*, and the rump is partly yellow; the central crown-streak also appears to be too distinct for *P. humii*, unless this feature is exaggerated in the young of that species. The dullness of the yellow on the head mentioned by Mr. Brooks is probably on account of its immaturity.

## 86. ACANTHOPNEUSTE MAGNIROSTRIS (Blyth).

Male, adult, Vale of Kashmir, August 23, 1891; 6,000 feet.

Female, adult, Vale of Kashmir, August 23, 1891; 6,000 feet.

## 87. ACANTHOPNEUSTE VIRIDANUS (Blyth).

Male, adult, central Kashmir, July 22, 1891; 11,000 feet.

Male, adult, central Kashmir, July 28, 1891; 11,000 feet. "Upper mandible dark brown; lower mandible light brown; feet light greenish brown above, yellow below; irides dark brown."

## 88. ACANTHOPNEUSTE OCCIPITALIS (Jerdon).

Female, adult, western Kashmir, July 2, 1891; 7,000 feet.

Male, adult, western Kashmir, July 3, 1891; 7,000 feet.

Male, adult, western Kashmir, July 6, 1891; 8,000 feet.

Female, adult, Lolab, Kashmir, July 11, 1891.

Male, adult, Nowboog Valley, eastern Kashmir, August 16, 1891; 7,000 feet.

Male, adult, Nowboog Valley, eastern Kashmir, May 26, 1892. "Upper mandible dark horn brown; lower mandible fleshy; feet dark fleshy brown, soles pale; irides dark brown; length, 5 inches."

Female, adult, Nowboog Valley, eastern Kashmir, May 29, 1892. "Feet fleshy brown; upper mandible dark brown; lower mandible pale yellowish brown; length, 4 $\frac{3}{4}$  inches."

Male, adult, Kaj Nag Mountains, Kashmir, April 25, 1892; 9,000 feet. "Upper mandible horn brown; lower mandible yellowish; feet fleshy brown, soles pale; length, 4 $\frac{7}{8}$  inches."

Male, adult, Krishnagunga Valley, northwest Kashmir, May 5, 1893; 7,000 feet. "Upper mandible horn brown; lower mandible brownish yellow; feet brownish flesh, soles yellow; length, 4 $\frac{7}{8}$  inches."

Male, adult, Krishnagunga Valley, Kashmir, May 6, 1893; 6,000 feet. "Upper mandible dark horn brown; lower mandible yellowish brown; feet pale horn brown, soles yellowish; length, 5 inches."

Male, adult, Sonamarg, Kashmir, June 19, 1893; 9,000 feet. "Bill horn brown above, yellowish beneath; feet fleshy brown; irides dark brown; length, 4 $\frac{7}{8}$  inches."

## 89. CRYPTOLOPHA XANTHOSCHISTA (Gray).

Male, young, Vale of Kashmir, north slope of Pir Panjal range, August 21, 1891; 6,000 feet.

Female, adult, Sind Valley, Kashmir, April 2, 1892; 6,000 feet. "Bill black above, yellow beneath; feet pale brown; irides brown; length, 4 $\frac{3}{8}$  inches."

These specimens appear to be somewhat intermediate in color and size between the above species and *C. jerdoni*. The sides of crown and nape are not concolorous with the back, nor are they dark blackish

gray; they are only slightly darker than the back, and on the whole I think they should be referred to *C. xanthoschista*. The adult bird measures—Wing, 2.08 inches; tail, 1.67; tarsus, 0.72; culmen, 0.38; the young bird—Wing, 2.20 inches; tail, 1.80; tarsus, 0.75; culmen, 0.38.

Mr. Brooks confirms the identification of *C. xanthoschista*.

#### 90. HORORNIS PALLIDUS (Brooks).

Male, adult, Kaj Nag Mountains, Kashmir, April 14, 1892; 7,000 feet. "Upper mandible dark horn brown; lower mandible paler; feet pale fleshy brown; irides clear brown; length,  $5\frac{1}{8}$  inches."

Male, adult, Lolab Valley, Kashmir, May 13, 1893; 6,000 feet. "Length,  $4\frac{7}{8}$  inches."

#### 91. REGULUS REGULUS HIMALAYENSIS (Gould).

Male, adult, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet.

Male, young, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Female, adult, central Kashmir, September 15, 1891; 10,000 feet.

Male, adult, Haramosh, Baltistan, February 25, 1892; 7,000 feet. "Bill black; tarsi dark brown; feet pale brown; irides dark brown; length,  $3\frac{3}{4}$  inches."

Female, adult, Haramosh, Baltistan, February 26, 1892; 7,000 feet. "Bill black; tarsi dark brown; toes pale brown; irides dark brown; length,  $3\frac{7}{16}$  inches."

This appears to be a good subspecies, paler and grayer on the back than the ordinary goldcrest of Europe.

### Family TURDIDÆ.

#### 92. PRATINCOLA MAURA (Pallas).

Male, adult, Vale of Kashmir, June 28, 1891.

Female, adult, Vale of Kashmir, June 28, 1891.

Male, adult, Vale of Kashmir, June 29, 1891.

Male, adult, Lolab Valley, Kashmir, July 12, 1891.

Male, adult, Gagangir, Sind Valley, Kashmir, March 31, 1892; 8,000 feet. "Bill and feet black; irides dark brown; length,  $5\frac{1}{8}$  inches."

Male, immature, Gagangir, Sind Valley, Kashmir, March 31, 1892; 8,000 feet. "Bill and feet black; irides dark brown; length, 5 inches."

Male, immature, Sind Valley, Kashmir, June 16, 1893; 6,000 feet. "Bill and feet black; length, 5 inches."

One of the immature males in this series is in the plumage of the female; the other differs slightly in having the bases of the buff throat feathers nearly or quite black instead of dusky gray, and a few black feathers showing on the ear coverts on one side and on the loreal region of the other.

The seven specimens in this collection are apparently of one form, but they are not the same as the bird found in Korea, China and Japan,

from which countries we have an extensive series. This latter form differs from the birds collected by Dr. Abbott in having a uniformly shorter bill, which is considerably wider at the base.

## 93 OREICOLA FERREA (Hodgson).

Male, adult, Nowboog Valley, eastern Kashmir, May 31, 1892; 7,000 feet. "Bill and feet black; irides dark brown; length,  $5\frac{5}{8}$  inches."

Male, adult, western Kashmir, April 21, 1893; 6,500 feet. "Bill and feet black; irides dark brown: length,  $5\frac{3}{8}$  inches."

Female, adult, Lolab Valley, Kashmir, May 14, 1893; 6,000 feet.

## 94. SAXICOLA PICATA, Blyth.

Male, adult, Khartaksho, Indus Valley, Baltistan, March 23, 1892; 8,000 feet. "Bill and feet black; irides dark brown; length,  $6\frac{1}{2}$  inches."

Male, adult, Tarkuti, Indus Valley, Baltistan, March 25, 1892; 8,600 feet. "Bill and feet black; irides very dark brown; length,  $6\frac{3}{8}$  inches."

The first specimen recorded above has a grayish white forehead, inclining to almost white on the sides, and extending back toward the eye, while the crown has a grayish streaked appearance, showing an approach to *Saxicola picata capistrata* (Gould).

## 95. SAXICOLA PLESCHANKA, Lepechin. (?)

Male, adult, Kargil, Kashmir, June 24, 1893; 9,000 feet. "Bill and feet black; length, 6 inches."

Male, adult, Pashgam, Kashmir. June 25, 1893; 9,000 feet. "Bill and feet black; length, 6 inches."

The breeding bird of Kashmir is so much smaller than northern examples, that I very much doubt the propriety of calling the Kashmir specimens *S. pleschanka*. A dozen or more specimens obtained in Kashmir during summer are present in the National Museum series, and all are of this same small form. The much shifted name *morio* may be applicable to this Kashmir breeding bird, though I doubt it very much. Hume's *S. hendersoni* came from Yarkand, and, being a fall bird, probably belongs to the northern *S. pleschanka*. It is to be hoped that some of the experts on *Saxicola* will clear up this question.

*Measurements of Saxicola pleschanka.*

U. S. N. M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Culmen.
150380	Male ad...	Kargil, Kashmir .....	June 24	<i>Inches.</i> 3.59	<i>Inches.</i> 2.40	<i>Inches.</i> 0.89	<i>Inches.</i> 0.50
150381	Male ad...	Pashgam, Kashmir.....	June 25	3.63	2.37	.89	.50

## 96. SAXICOLA MONTANA, Gould.

Female, young, Leh, Ladak, July 1, 1893; 11,000 feet. "Bill and feet black; gape yellow."

Male, adult, Leh, Ladak, July 8, 1893; 11,000 feet. "Bill and feet black; irides dark brown."

Male, adult, Fotu-la Pass, Ladak, June 27, 1893; 12,000 feet. "Bill and feet black; length,  $6\frac{1}{2}$  inches."

Female, young, Fotu-la Pass, Ladak, June 27, 1893; 12,000 feet. "Bill and feet black; length, 6 inches."

Female, young, Namika-la Pass, Kashmir, June 26, 1893; 12,000 feet. "Bill and feet black; gape yellow; length,  $6\frac{1}{4}$  inches."

The two adult males are typical of *S. montana* as to the white on the inner webs of the wing feathers, but the dimensions are rather less than usual. These specimens and the young in first plumage confirm the presence of the species as a resident bird in Kashmir and Ladak.

*Measurements of Saricola montana.*

U. S. N. M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Culmen.
				Inches.	Inches.	Inches.	Inches.
150373	Male ad...	Fotu-la Pass, Ladak .....	June 27	3.80	2.61	1.09	0.60
150374	Male ad...	Leh, Ladak .....	July 8	3.80	2.61	1.06	.59

97. ENICURUS MACULATUS, Vigors.

Young, Vale of Kashmir, August 13, 1891.

Male, adult, Lolab Valley, Kashmir, April, 14, 1893; 5,600 feet. "Bill black; feet fleshy white; irides dark brown; length, 11 inches."

Male, adult, western Kashmir, April 21, 1893; 6,000 feet. "Bill black; feet fleshy white; irides brown; length,  $10\frac{3}{4}$  inches."

98. MICROCICHLA SCOULERI (Vigors).

Female, adult, central Kashmir, October 10, 1891; 9,000 feet. "Bill black; feet pale fleshy white; length,  $5\frac{1}{4}$  inches."

Female, adult, Krishnagunga Mountains, western Kashmir, April 26, 1893. "Bill black; feet fleshy white; length,  $5\frac{1}{4}$  inches."

99. CHAIMARRHORNIS LEUCOCEPHALA (Vigors).

Male, adult, western Kashmir, July 8, 1891; 8,000 feet.

Female, adult, central Kashmir, July 26, 1891; 11,000 feet.

Young, central Kashmir, July 26, 1891; 11,000 feet.

Female, adult, Pir Panjal range, Kashmir, August 27, 1891; 9,000 feet.

100. PHOENICURUS FRONTALIS, Vigors.

Male, young, central Kashmir, north of Mount Haramosh, July 17, 1891; 11,000 feet.

Male, young, central Kashmir, July 23, 1891; 11,000 feet.

Male, adult, central Kashmir, July 24, 1891; 11,000 feet.

Female, adult, central Kashmir, July 25, 1891; 11,000 feet.

Male, immature, central Kashmir, September 29, 1891; 11,000 feet.

"Length,  $6\frac{1}{8}$  inches."

## 101. PHOENICURUS ERYTHRONOTUS (Eversmann).

Female, adult, Shigar, Baltistan, January 16, 1892; 8,000 feet. "Bill and feet black; length,  $6\frac{1}{8}$  inches."

## 102. PHOENICURUS RUFIVENTRIS (Vieillot).

Male, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Bill and feet black; length,  $5\frac{3}{8}$  inches."

Male, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Bill and feet black; irides brown; length,  $5\frac{7}{8}$  inches."

Male, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Bill and feet black; irides brown; length,  $6\frac{1}{8}$  inches."

Male, immature, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Bill and feet black; length,  $5\frac{7}{8}$  inches."

Male, immature, Dras, Kashmir, June 23, 1893; 10,000 feet. "Bill and feet black."

Male, young, Khardong, Ladak, July 15, 1893; 13,000 feet. "Upper mandible horn black; lower mandible horn brown; feet brownish black; length,  $5\frac{3}{8}$  inches."

The immature males, which are in the garb of the female, have a few russet feathers on the lower breast; they are in rather worn plumage. The young bird is in the nestling plumage, and is described below:

Forehead, crown, nape, back, scapulars, sides of neck, throat and breast hair brown, with indistinct darker edges to the individual feathers, and somewhat lighter buffy centers to those of the throat and breast; ear-coverts and center of back of a slightly darker shade and tinged with pale Prout's brown; abdomen and flanks buff, the feathers with faint dusky edges on sides of abdomen; thighs and under tail-coverts uniform deep brownish buff; under wing-coverts buff; upper tail-coverts tawny ochraceous (as in the adult), some of the feathers with indistinct dusky tips; tail deep russet, inclining to chestnut (similar to adult male in fresh fall plumage), with the center pair of feathers blackish for their terminal two-thirds, and the narrow outer web largely deep russet, similar to the others; lesser and middle wing-coverts dusky blackish, the feathers broadly edged with isabella color; greater coverts dusky blackish, with outer webs and tips edged with pale russet; wing feathers dusky blackish, the outer webs of primaries, primary coverts, and secondaries narrowly edged with pale isabella color; tertiaries more broadly edged and tipped with pale russet, like the greater wing-coverts.

## 103. PHOENICURUS ERYTHROGASTER (Güldenstadt).

Male, adult, Skardu, Baltistan, November 20, 1891; 7,000 feet. "Bill and feet black; irides brown; length,  $6\frac{7}{8}$  inches."

Male, adult, Skardu, Baltistan, November 20, 1891; 7,000 feet. "Bill and feet black."



Female, adult, Braldu Valley, Baltistan, December 23, 1891.

Male, adult, Braldu Valley, Baltistan, December 29, 1891; 9,000 feet.

"Bill and feet black; irides dark brown; gape yellow; length, 7 inches."

Male, adult, Braldu Valley, Baltistan, January 2, 1892; 9,000 feet.

"Bill and feet black; irides dark brown; length, 7 inches."

Female, adult, Shigar Valley, Baltistan, November 24, 1891; 8,000 feet.

Young, Sasser Pass, Ladak, July 22, 1893; 16,000 feet. "Feet black; length,  $5\frac{1}{2}$  inches."

The young bird from Sasser Pass is doubtless a male, as it has the white wing patch well developed. It differs from the adult male in winter plumage chiefly as follows: Upper parts dull grayish brown, lighter and with a buffy tinge on nape and rump, the feathers with dusky tips; upper tail-coverts pale russet; throat and breast grayish buff, lighter on ear-coverts and sides of neck, all the feathers with dusky tips; lower breast buff; the feathers with dusky tips; abdomen, under tail-coverts, flanks and thighs, uniform buff. Tail and wings similar to the adult male in winter plumage, but lesser wing-coverts and some of the feathers of the middle coverts are strongly tipped with buff. The white patch on the wing is not included on the primaries in this stage, from the fact that these feathers are only partly grown out.

#### 104. RHYACORNIS FULIGINOSA (Vigors).

Female, young, eastern Kashmir, August 18, 1891; 6,000 feet.

Male, adult, central Kashmir, September 20, 1891; 9,000 feet.

Male, adult, central Kashmir, September 20, 1891; 9,000 feet.

Male, adult, Nowboog Valley, eastern Kashmir, May 30, 1892; 6,500 feet. "Bill and feet black; length,  $5\frac{1}{2}$  inches."

Male, adult, Nowboog Valley, eastern Kashmir, May 31, 1892; 7,000 feet. "Bill and feet black; length,  $5\frac{1}{2}$  inches."

Female, adult, Lolab Valley, Kashmir, April 20, 1893. "Bill black; feet dark fleshy brown."

#### 105. CYANECULA SUECICA (Linnæus).

Male, adult, Skardu, Baltistan, March 18, 1892; 7,500 feet. "Bill black; feet dark fleshy brown, soles pale; length, 6 inches."

Male, adult, Gol, Indus Valley, Baltistan, March 21, 1892; 8,000 feet. "Bill black, feet dark brownish flesh; irides dark brown; length, 6 inches."

Male, adult, Pashgam, Kashmir, June 25, 1893; 9,000 feet. "Bill black, gape yellow; feet brownish black; irides dark brown: length,  $5\frac{3}{4}$  inches."

Male, adult, Leh, Ladak, July 5, 1893; 12,000 feet. "Bill and feet black, gape yellow; irides dark brown: length,  $5\frac{3}{4}$  inches."

Male, adult, Nubra Valley, Ladak, July 18, 1893; 11,000 feet. "Bill and feet black; length,  $5\frac{3}{4}$  inches."

Three of the specimens in this series, those collected in June and July, have a slight admixture of white on the lower border of the russet patch on the throat, and the basal half of each russet feather is white. These birds are in worn summer plumage, and in only one of the examples is there any trace of russet on the lower breast. In two of the specimens, from Leh and Pashgam, and in a March specimen from Skardu, the lores are tinged with blue; in looking over our series of this species, I find a specimen from Norway also with blue on the lores. In the two Baltistan birds, collected in March, the russet patch is without white at the base.

106. *CYANECULA ABBOTTI*, new species.

Forehead, crown (except sides), nape, back, scapulars and rump, uniform deep hair brown; sides of neck similar, but paler and more ashy; lores grayish blue, whitish above; superciliary line distinct, whitish, tinged with blue from the lores posteriorly to a point over the eyes; sides of crown bordering superciliary line clove brown; ear-coverts light dusky gray, with streaks of hair brown; throat and malar region blue (between campanula and cobalt blue), with a spot of silky white below the center; blue of throat bordered below by a band of black (with a bluish tinge); this is succeeded by a narrow, broken, almost obsolete band of white, which in turn is followed by a band of russet; rest of lower breast, abdomen, and under tail coverts white, some of the feathers of the latter with pale russet centers; sides of body and flanks wood brown; thighs hair brown. Wing feathers dark dusky brown, with narrow lighter edgings on the external webs; lesser wing-coverts grayish brown (like sides of neck), the feathers with darker centers; middle and greater coverts and primary coverts dark dusky brown like wing feathers, with lighter edgings on the external webs; underwing-coverts and axillaries buff; under primary coverts pale cream buff. Middle pair of tail feathers brownish black; four outer pairs russet for their basal two-thirds, terminal third black; second pair from middle similar to the four outer pairs, but the black on inner web extends a half inch nearer the base; upper tail-coverts dark grayish brown (darker and grayer than back and rump), some of the feathers with russet centers and shafts. Wing, 2.86 inches; tail, 2.31; tarsus, 1.07; middle toe (without claw), 0.58; exposed culmen, 0.52. "Length,  $5\frac{3}{4}$  inches; bill and feet black, soles yellowish; irides brown."

*Type*.—No. 150370, U.S.N.M. Male, adult; Nubra Valley, Ladak, July 16, 1893; 10,000 feet; Dr. W. L. Abbott, collector.

This interesting bird, of which Dr. Abbott has sent three specimens, is very closely related to the White-spotted Bluethroat, *Cyanecula wolfii* (Brehm), but differs from it in the deeper blue of the throat, in the blue lores, and in the longer bill, which latter character is more easily seen on comparison of specimens than expressed in figures. The specimens are in somewhat worn breeding plumage, which probably accounts for the grayer color of the upper parts and ear coverts, and the more

restricted russet band on breast (almost obsolete in one of the examples), when compared with specimens of *C. wolfii* in fresh plumage. It is very interesting to note that *C. succica* and the present species are both resident in the Nubra Valley, at the same altitude, as shown by Dr. Abbott's specimens, and as previously recorded by Dr. Sharpe,<sup>1</sup> and in one of our specimens of the new form we find two or three of the silky white feathers composing the throat patch to have faint traces of russet. On the other hand, as recorded under the preceding species, some of the examples of that species from this region have white on the throat patch, and a tinge of blue on the lores; they are, however, certainly referable to *C. succica*, and not the present species. The three specimens of the new form have the bills, tarsi and feet black; more so than in any specimens of *C. wolfii* in the National Museum collection.

White-spotted Bluethroats have several times been recorded from Ladak and Kashmir as the ordinary *C. wolfii*, but it is probable that all the resident birds of this region are referable to the form here described. Major Biddulph has found it in the Nubra Valley in June, and at Gilgit, Kashmir, in April,<sup>2</sup> and Hume<sup>3</sup> writes, "In the interior of the Himalayas, north of Ley and the Indus, many specimens have been met with."

*Measurements of Cyanecula abbotti.*

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Exposed culmen.
150370	Male ad.....	Nubra Valley .....	July 16	<i>Inches.</i> 2.86	<i>Inches.</i> 2.21	<i>Inches.</i> 1.07	<i>Inches.</i> *0.52
150371	Male ad.....	do.....	July 17	2.80	2.16	1.08	†.54
150372	Male ad.....	do.....	July 18	2.80	2.24	1.11	‡.51

\* "Length, 5¼ inches."

† "Length, 5½ inches."

‡ "Length, 5⅝ inches."

*Measurements of Cyanecula wolfii.*

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Exposed culmen.
77780	Male ad.....	Heligoland .....	Apr. —	<i>Inches.</i> 2.80	<i>Inches.</i> 2.02	<i>Inches.</i> 1.06	<i>Inches.</i> .47
115625	Male ad.....	Nice .....	Apr. —	3.08	2.37	1.09	.49
115624	Male ad.....	do.....	Apr. —	2.87	2.21	1.07	.47

107. MELODES PECTORALIS (Gould).

Female, adult, Mount Montir, Kashmir, July 16, 1891; 10,000 feet.

Male, adult, central Kashmir, July 23, 1891; 11,000 feet.

Female, adult, central Kashmir, July 24, 1891; 11,000 feet.

Male, adult, central Kashmir, July 28, 1891; 12,000 feet. "Bill and feet black; irides dark brown."

Male, adult, Zogi-bul Pass, Kashmir, June 20, 1893; 11,000 feet. "Bill black; feet brownish black; length, 6½ inches."

<sup>1</sup> Second Yarkand Mission, London, 1891: Aves, p. 90.

<sup>2</sup> The Ibis, 1881, p. 65.

<sup>3</sup> Stray Feathers, VII, 1878, p. 392.

## 108. IANTHIA RUFILATA (Hodgson).

Male, adult, central Kashmir, July 23, 1891; 11,000 feet.

Female, adult, central Kashmir, July 23, 1891; 12,000 feet.

Female, adult, central Kashmir, July 23, 1891; 11,000 feet; two specimens.

Male, immature, central Kashmir, July 24, 1891; 11,000 feet.

Male, adult, central Kashmir, July 28, 1891; 11,000 feet. "Bill and feet black; irides dark brown."

Male, immature, central Kashmir, July 28, 1891; 12,000 feet.

Young, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Male, adult, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet.

"Length, 5 $\frac{3}{4}$  inches."

Male, young, western Kashmir, September 11, 1891; 9,000 feet.

An adult male from central Kashmir has a distinct spot of silky white feathers in the blue superciliary line, just posterior to the eyes; the plumage is otherwise quite normal.

## 109. MERULA MERULA MAXIMA (Seebohm).

Female, adult, central Kashmir, July 22, 1891; 11,000 feet.

Female, adult, central Kashmir, July 27, 1891; 12,000 feet.

These specimens are in very abraded summer plumage, and were doubtless resident and breeding in central Kashmir. They bear out Mr. Seebohm's original measurements and point to the higher altitudes as the summer home of this form. It is quite probable that this bird does not range very far north of Kashmir, as the birds of eastern Turkestan are referable to a form intermediate between this one and the common Blackbird of Europe. The Abbott specimens, though much abraded, give the following measurements:

*Measurements of Merula merula maxima.*

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Exposed culmen.
				<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
125490	Female ad..	Central Kashmir.....	July 22	5.82	5.07	1.40	0.96
125489	Female ad..	.....do.....	July 27	5.89	4.73	1.40	.96

Mr. Seebohm's measurements of the Jerdon Kashmir specimen are: Wing, 5.85 inches; tail, 4.90; tarsus, 1.50; culmen, 0.95.

## 110. MERULA CASTANEA, Gould.

Male, adult, western Kashmir, July 3, 1891; 7,000 feet.

Male, adult, western Kashmir, July 6, 1891; 8,000 feet.

Male, adult, Lolab, Kashmir, July 12, 1891; 6,000 feet.

Female, adult, Kaj Nag Mountains, Kashmir, April 23, 1892; 8,000 feet. "Bill yellow; feet dirty yellow; length, 10 $\frac{3}{4}$  inches."

111. *MERULA ATROGULARIS* (Temminck).

Male, immature, Sind Valley, Kashmir, November 5, 1891; 6,000 feet. "Occurring in large flocks at the present time, especially in the mountains."

Male, adult, Indus Valley, Baltistan, November 18, 1891; 8,000 feet. "Bill dark horn brown; lower mandible yellowish at base; tarsi pale flesh color; toes dark; length,  $10\frac{3}{8}$  inches."

Female, adult, Braldu Valley, Baltistan, December 31, 1891; 9,000 feet. "Bill dark horn brown; lower mandible yellowish at base; feet fleshy brown; irides dark brown; length,  $9\frac{7}{8}$  inches."

Female, adult, Sligar, Baltistan, January 20, 1892; 8,000 feet. "Bill black; lower mandible yellow at base; feet brownish flesh; irides dark brown; length,  $9\frac{3}{4}$  inches."

Female, adult, Skardu, Baltistan, January 27, 1892; 7,000 feet. "Upper mandible dark horn brown, lower mandible yellowish toward gape; irides dark brown; length, 10 inches; feet pale brownish flesh."

Male, adult, Skardu, Baltistan, March 18, 1892; 7,500 feet. "Tarsi pale fleshy brown; toes dark fleshy brown; upper mandible horn brown, yellow along gape; lower mandible yellow, brown at tip; irides dark brown; length,  $10\frac{1}{4}$  inches."

Male, adult, Srinagar, Kashmir, April 4, 1892; 5,200 feet. "Upper mandible brownish black, becoming yellow at gape; lower mandible black at tip, the rest dull yellow; feet fleshy brown; irides brown; length,  $10\frac{3}{8}$  inches."

Female, adult, Kaj Nag Mountains, Kashmir, April 14, 1892; 7,000 feet. "Bill dark horn brown; lower mandible yellow at base; tarsi pale fleshy brown; toes dark fleshy brown; length,  $9\frac{3}{4}$  inches."

112. *MERULA UNICOLOR* (Tickell).

Male, adult, Vale of Kashmir, June 25, 1891; two specimens.

Female, adult, Vale of Kashmir, June 29, 1891.

Male, adult, Sopor, Vale of Kashmir, April 11, 1892; 5,200 feet. "Bill yellow; feet yellowish brown; irides dark brown; length, 9 inches."

Male, adult, eastern Kashmir, August 19, 1891.

Male, adult, Lolab Valley, Kashmir, July 12, 1891.

Male, adult, Lolab Valley, May 12, 1893; 6,000 feet. "Bill orange yellow; feet brownish yellow; length,  $9\frac{1}{4}$  inches."

113. *TURDUS VISCIVORUS HODGSONI* (Homeyer).

Male, adult, western Kashmir, September 11, 1891; 8,000 feet. "Bill dark brown, lower mandible lighter at base; feet yellowish brown, claws nearly black."

Male, adult, central Kashmir, September 13, 1891; 10,000 feet. "Bill dark brown; feet yellowish brown; length,  $11\frac{3}{4}$  inches."

114. *OREOCINCLA DAUMA* (Latham).

Male, adult, western Kashmir, July 3, 1891; 7,000 feet.

115. *PETROPHILA CINCLORHYNCHA* (Vigors).

Male, adult, Lolab Valley, Kashmir, May 15, 1893; 6,000 feet. "Bill black, gape yellow; irides dark brown; feet dark fleshy brown; soles yellowish; length,  $7\frac{3}{4}$  inches."

116. *PETROPHILA SOLITARIA* (Linnæus).

Male, adult, Sonamarg, Sind Valley, Kashmir, June 18, 1893; 9,000 feet. "Bill and feet black; irides hazel; length,  $9\frac{5}{8}$  inches."

Male, adult, Dras Valley, Kashmir, June 21, 1893; 10,000 feet. "Bill and feet black; length,  $8\frac{3}{4}$  inches."

Female, adult, Dras, Kashmir, June 23, 1893; 10,000 feet. "Bill black; feet blackish brown; irides clear brown; length,  $8\frac{1}{2}$  inches."

117. *MONTICOLA SAXATILIS* (Linnæus).

Male, immature, central Kashmir, September 22, 1891; 11,000 feet. "Upper mandible dark horn brown; lower mandible dark horn brown at tip, becoming lighter at base; length,  $7\frac{3}{4}$  inches."

## Family CINCLIDÆ.

118. *CINCLUS CINCLUS CASHMIRIENSIS* (Gould).

Female, adult, Braldu Valley, Baltistan, December 10, 1891; 10,500 feet. "Bill black; tarsi pale leaden in front, dark brown behind; soles of feet pale; irides clear brown; length,  $7\frac{5}{8}$  inches; extent,  $11\frac{3}{8}$  inches."

Female, adult, Braldu Valley, Baltistan, December 10, 1891; 10,500 feet. "Tarsi leaden in front, dark brown behind; length,  $7\frac{5}{8}$  inches. Shot while running about upon the ice, apparently perfectly at home."

Female, adult, Braldu Valley, Baltistan, December 10, 1891; 10,500 feet. "Bill dark horn brown; feet dark brown, except front of tarsi, where pale."

Female, adult, Shigar, Baltistan, January 16, 1892; 8,000 feet. "Bill almost black; front of tarsi brownish, darker behind; top of toes leaden; irides clear hair brown; length,  $7\frac{1}{8}$  inches."

Male, adult, Leh, Ladak, July 5, 1893; 12,000 feet. "Bill black; front of tarsi and top of toes pale leaden; back of tarsi dark brown; soles grayish; irides clear brown; length,  $8\frac{1}{4}$  inches."

119. *CINCLUS ASIATICUS*, Swainson.

Female, young, western Kashmir, July 8, 1891; 8,000 feet.

Female, young, central Kashmir, September 20, 1891; 9,000 feet.

Female, adult, Indus Valley, Baltistan, November 15, 1891; 9,000

feet. "Bill black; front of feet leaden, dusky behind, soles paler; length,  $7\frac{3}{4}$  inches."

Male, adult, Indus Valley, Baltistan, November 17, 1891; 8,000 feet.

Female, adult, Indus Valley, Baltistan, November 17, 1891; 8,000 feet. "Bill very dark horn, nearly black; feet pale leaden, darker behind, soles whitish; length,  $7\frac{1}{2}$  inches."

Male, adult, Braldu Valley, Baltistan, December 26, 1891; 9,000 feet. "Bill black; irides clear brown; front of tarsi leaden, black behind; length,  $8\frac{1}{2}$  inches."

Female, adult, Braldu Valley, Baltistan, December 28, 1891; 9,000 feet. "Bill black; irides clear brown; tarsi and upper surface of toes leaden; back of tarsi black; soles yellowish; length, 8 inches."

Female, adult, Rondu, Baltistan, January 31, 1892; 7,000 feet. "Bill black; tarsi and upper surface of toes leaden, black behind; irides hair brown; length,  $7\frac{3}{4}$  inches. Excessively fat."

Male, adult, Sind Valley, Kashmir, April 1, 1892; 7,000 feet. "Bill black; tarsi pale leaden in front, dark leaden behind; soles pale; irides brown; length,  $8\frac{1}{2}$  inches."

#### Family TROGLODYTIDÆ.

##### 120. TROGLODYTES NIPAENSIS NEGLECTUS (Brooks).

Male, adult, central Kashmir, July 23, 1891; 11,000 feet.

Female, adult, central Kashmir, July 24, 1891, 11,000 feet.

Male, adult, central Kashmir, July 24, 1891; 11,000 feet.

Male, immature, Pir Panjal Range, Kashmir, August 29, 1891; 9,000 feet. "Length,  $3\frac{3}{4}$  inches."

Male, adult, Indus Valley, Baltistan, November 16, 1891; 8,000 feet. "Upper mandible dark brown; lower mandible light brown; feet dark brownish flesh color; length,  $3\frac{3}{4}$  inches."

Female, adult, Indus Valley, Baltistan, November 16, 1891; 8,000 feet. "Length,  $3\frac{1}{2}$  inches."

Male, adult, Braldu Valley, Baltistan, December 28, 1891; 9,000 feet. "Length,  $3\frac{1}{2}$  inches."

Male, adult, Braldu Valley, Baltistan, January 2, 1892; 9,000 feet. "Upper mandible dark brown; lower mandible pale brown; irides dark brown; length,  $3\frac{1}{2}$  inches."

#### Family ACCENTORIDÆ.

##### 121. ACCENTOR COLLARIŞ RUFILATUS, Sharpe.

Male, adult, Indus Valley, Baltistan, November 15, 1891; 9,000 feet.

Male, adult, Indus Valley, Baltistan, November 16, 1891; 8,000 feet. "Upper mandible black except at gape, where yellow; lower mandible black at tip, base yellow; feet reddish flesh color, soles yellowish; irides brown; length,  $6\frac{3}{4}$  inches."

Female, adult, Rondu, Baltistan, February 4, 1892; 6,000 feet. "Bill black, except base of lower mandible, which is yellow; feet pale reddish brown; irides reddish brown; length,  $6\frac{3}{8}$  inches."

Male, adult, Haramosh, Baltistan, March 4, 1892; 7,000 feet. "Upper mandible black, with yellow spot at gape; lower mandible black at tip, the rest yellow; feet pale reddish brown. soles yellow; irides clear reddish brown; length,  $6\frac{5}{8}$  inches."

*Measurements of Accentor collaris rufilatus.*

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Tarsus.	Culmen.
				<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
126801	Male ad...	Indus Valley, Kashmir....	Nov. 15	3.75	2.58	0.94	0.55
126800	Male ad...	do.....	Nov. 16	3.83	2.71	.97	.56
126802	Female ad...	Rondu, Baltistan.....	Feb. 4	3.51	2.47	.94	.51
126799	Male ad...	Haramosh, Baltistan.....	Mar. 4	3.80	2.63	.97	.56

122. ACCENTOR HIMALAYANUS, Blyth.

Female, adult, central Kashmir, September 22, 1891; 11,000 feet. "Feet yellowish brown; bill black, lower mandible yellowish at base; irides reddish brown."

Female, adult, central Kashmir, September 24, 1891; 11,000 feet. "Feet brownish flesh color; bill black; length,  $6\frac{1}{8}$  inches."

123. PRUNELLA FULVESCENS (Severtzoff).

Female, adult, Indus Valley, Baltistan, November 16, 1891; 8,000 feet. "Bill black; feet pale reddish flesh color; irides red brown; length, 6 inches."

Female, adult, Indus Valley, Baltistan, November 15, 1891; 9,000 feet.

Adult, Shigar Valley, Baltistan, November 22, 1891; 7,500 feet.

Male, adult, Braldu Valley, Baltistan, January 2, 1892; 9,000 feet. "Bill black; feet brownish flesh color; irides clear hair brown; length,  $6\frac{1}{8}$  inches."

Male, adult, Shigar, Baltistan, January 16, 1892; 8,000 feet. "Bill black; feet pale reddish brown; irides clear brown; length,  $6\frac{1}{8}$  inches."

Female, adult, Shigar, Baltistan, January 20, 1892; 8,000 feet. "Bill black; feet pale reddish brown; irides clear brown; length,  $5\frac{7}{8}$  inches."

Female, adult, Shigar, Baltistan, January 24, 1892; 8,000 feet. "Bill black, whitish at gape; feet pale reddish brown; length,  $6\frac{1}{8}$  inches."

Female, adult, Haramosh, Baltistan, February 5, 1892; 7,000 feet. "Bill black; feet pale fleshy brown; irides brown."

124. PRUNELLA ATRIGULARIS (Brandt).

Male, adult, Sind Valley, Kashmir, November 8, 1891; 9,000 feet.

Male, adult, Braldu Valley, Baltistan, December 30, 1891; 9,000 feet.



"Bill black, gape whitish; irides hair brown; feet brownish flesh color; length,  $6\frac{1}{4}$  inches."

Female, adult, Haramosh, Baltistan, February 16, 1892; 5,000 feet. "Bill black; feet brownish flesh; irides brown; length,  $6\frac{1}{8}$  inches."

#### 125. PRUNELLA RUBECULOIDES (Moore).

Male, adult, Braldu Valley, Baltistan, December 30, 1891; 9,000 feet. "Bill black; feet reddish flesh; irides reddish brown; length,  $6\frac{1}{2}$  inches."

Female, adult, Khardong Pass, Ladak, July 14, 1893; 16,000 feet. "Bill black; feet pale reddish brown, claws black; irides pale brown; length,  $6\frac{1}{2}$  inches."

Male, adult, Khardong, Ladak, July 15, 1893; 13,000 feet. "Bill black; feet pale reddish brown; irides pale brown; length,  $6\frac{3}{8}$  inches."

Male, adult, Sasser Pass, Ladak, July 20, 1893; 16,000 feet. "Bill black; feet pale reddish flesh color; length,  $6\frac{3}{8}$  inches."

#### 126. PRUNELLA JERDONI (Brooks).

Male, adult, central Kashmir, July 23, 1891; 11,000 feet.

Female, adult, central Kashmir, July 26, 1891; 12,000 feet.

Female, adult, central Kashmir, July 29, 1891; 12,000 feet.

Immature, central Kashmir, September 13, 1891; 10,000 feet.

Female, adult, central Kashmir, September 30, 1891; 10,000 feet.

Male, adult, Gund, Sind Valley, Kashmir, April 1, 1892; 7,000 feet. "Bill black; feet pale fleshy brown; irides reddish brown; length,  $5\frac{3}{4}$  inches."

Female, adult, Lolab Valley, Kashmir, May 13, 1893; 6,000 feet. "Length,  $5\frac{1}{4}$  inches."

Some of the above specimens, notably one from central Kashmir, show streaks on the crown, indicating an approach to *Prunella strophiatas*, with which it may some day be found to intergrade.

### Family TIMELIIDÆ.

#### 127. TROCHALOPTERON LINEATUM (Vigors).

Female, adult, Mount Montir, central Kashmir, July 15, 1891; 8,000 feet.

Male, adult, north slope of Pir Panjal range, Vale of Kashmir, August 21, 1891; 6,000 feet. "Upper mandible dark brown; lower mandible pale flesh color; feet brown."

Female, adult, Vale of Kashmir, November 4, 1891; 5,000 feet.

Male, adult, Vale of Kashmir, November 4, 1891; 5,000 feet. "At this season one of the commonest and most familiar birds."

Female, adult, Braldu Valley, Baltistan, December 27, 1891; 9,000 feet. "Bill dark fleshy brown above, pale below; feet pale brownish flesh; irides reddish brown; length,  $8\frac{3}{8}$  inches."

Male, adult, Braldu Valley, Baltistan, January 3, 1892; 9,000 feet. "Upper mandible dark horn brown; lower mandible pale brown; feet brownish flesh; irides brown; length,  $8\frac{1}{2}$  inches."

128. MYOPHONUS TEMMINCKII (Vigors).

Female, adult, western Kashmir, July 5, 1891; 7,000 feet. "Lower mandible yellow."

Male, immature, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Female, immature, Pir Panjal range, Kashmir, August 31, 1891; 7,000 feet.

Male, adult, Rondu, Baltistan, February 2, 1892; 6,000 feet. "Upper mandible black; yellow along commissure; lower mandible yellow; irides brown; length,  $13\frac{1}{4}$  inches."

129. LARVIVORA BRUNNEA, Hodgson.

Male, adult, Krishnagnuga Valley, Kashmir, May 6, 1893; 6,000 feet. "Bill black; feet pale fleshy brown; irides brown; length,  $5\frac{3}{8}$  inches."

Male, adult, Krishnagnuga Valley, Kashmir, May 10, 1893; 7,000 feet. "Bill black; feet pale brownish flesh; length,  $5\frac{3}{8}$  inches."

Family PYCNONOTIDÆ.

130. HYPSPETES PSAROIDES, Vigors.

Female, adult, Lolab, Kashmir, July 10, 1891. "Bill dark red; feet red."

Male, adult, Lolab Valley, Kashmir, July 12, 1891; 6,000 feet.

Female, adult, north slope of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet. "Bill coral red; feet orange red; irides dark brown."

131. MOLPASTES LEUCOGENYS (Gray).

Male, adult, Lolab, Kashmir, July 1, 1891.

Male, adult, Lolab Valley, Kashmir, July 10, 1891; 6,000 feet.

Male, adult, Vale of Kashmir, August 9, 1891.

Female, adult, Vale of Kashmir, August 9, 1891.

Family CAMPOPHAGIDÆ.

132. PERICROCOTUS BREVIROSTRIS (Vigors).

Female, adult, western Kashmir, July 7, 1891; 8,000 feet.

Male, adult, Lolab Valley, Kashmir, July 11, 1891; 6,000 feet.

Male, adult, Lolab Valley, Kashmir, July 12, 1891.

Female, immature, Lolab, Kashmir, September 10, 1891; 8,000 feet.

Male, adult, central Kashmir, August 2, 1891; 9,000 feet. "Length,  $7\frac{7}{8}$  inches."

Male, adult, Vale of Kashmir, August 14, 1891. "Length, 8 inches."

Female, adult, Vale of Kashmir, north slope of Pir Panjal Range, August 21, 1891; 6,000 feet. "Length,  $7\frac{3}{4}$  inches."

### Family MUSCICAPIDÆ.

#### 133. HEMICHELIDON SIBIRICA (Gmelin).

Male, adult, Lolab, Kashmir, July 1, 1891.

Female, adult, western Kashmir, July 7, 1891; 8,000 feet.

Female, adult, central Kashmir, July 26, 1891; 11,000 feet.

Female, immature, western Kashmir, September 11, 1891; 9,000 feet.

Male, adult, Vale of Kashmir, May 29, 1893. "Bill brownish black; lower mandible yellowish brown at base; feet black; irides dark brown; length,  $4\frac{3}{4}$  inches."

Male, adult, Lolab Valley, Kashmir, May 13, 1894; 7,000 feet. "Length,  $4\frac{3}{4}$  inches."

#### 134. SIPHIA HYPERYTHRA, Cabanis.

Male, adult, Lolab, Kashmir, July 10, 1891.

Male, young, Lolab, Kashmir, July 10, 1891.

Male, adult, Lolab Valley, Kashmir, May 12, 1893; 6,000 feet.

"Upper mandible dark horn brown; lower mandible brownish yellow; feet dark fleshy brown; length,  $4\frac{1}{8}$  inches."

Young, Vale of Kashmir, August 20, 1891; 6,000 feet.

Male, adult, Vale of Kashmir, April 27, 1892; 6,000 feet. "Upper mandible dark horn brown; lower mandible yellowish brown; irides clear brown; feet blackish brown; length,  $5\frac{1}{8}$  inches."

Female, adult, north slope of Pir Panjal range, Kashmir, August 22, 1891; 7,000 feet.

#### 135. CYORNIS SUPERCILIARIS (Jerdon).

Male, adult, western Kashmir, July 2, 1891; 7,000 feet.

Male, adult, western Kashmir, July 3, 1891; 7,000 feet.

Male, adult, Kaj Nag Mountains, Kashmir, April 25, 1892; 9,000 feet.

"Bill and feet black; irides blackish brown; length,  $4\frac{1}{8}$  inches."

Female, adult, Lolab Valley, Kashmir, April 20, 1893. "Bill and feet black; irides dark brown."

Female, adult, Lolab Valley, Kashmir, May 12, 1893; 6,000 feet. "Bill and feet black."

#### 136. CYORNIS LEUCOMELANURUS (Hodgson).

Male, immature, Nowboog Valley, eastern Kashmir, May 29, 1892; 7,000 feet. "Bill black; irides blackish brown; length,  $4\frac{3}{4}$  inches; feet blackish brown."

Male, adult, Nowboog Valley, Kashmir, May 31, 1892; 7,000 feet. "Bill black; irides dark brown; feet dark fleshy brown; length,  $4\frac{3}{4}$  inches"

Male, adult, Krishnagunga Valley, northwest Kashmir, May 5, 1893; 7,000 feet. "Bill black; feet brownish black; length,  $4\frac{3}{4}$  inches."

137. STOPAROLA MELANOPS (Vigors).

Male, adult, Lolab Valley, Kashmir, May 12, 1893; 6,000 feet. "Bill and feet black; irides dark brown; length,  $6\frac{1}{8}$  inches."

Male, adult, Vale of Kashmir, May 29, 1893. "Bill and feet black; irides dark brown; length,  $6\frac{1}{2}$  inches."

138. ALSEONAX RUFICAUDUS (Swainson).

Female, adult, western Kashmir, July 7, 1891; 8,000 feet.

Male, adult, western Kashmir, July 7, 1891; 8,000 feet.

Male, adult, Lolab Valley, Kashmir, May 14, 1893; 6,000 feet. "Upper mandible black; lower mandible yellowish brown; feet dark fleshy brown; length,  $5\frac{3}{8}$  inches."

Male, adult, Nowboog Valley, eastern Kashmir, May 29, 1892; 7,000 feet. "Upper mandible dark brown; lower mandible pale brown; feet very dark brown; length,  $5\frac{3}{4}$  inches."

Male, adult, Krishnagunga Valley, Kashmir, May 6, 1893; 6,000 feet. "Upper mandible dark horn brown; lower mandible yellowish brown; feet dark fleshy brown; length,  $5\frac{1}{2}$  inches."

Male, adult, Krishnagunga Valley, Kashmir, May 6, 1893; 6,000 feet. "Upper mandible black; lower mandible pale brownish horn; feet dark fleshy brown; length,  $5\frac{3}{8}$  inches."

139. TERPSIPHONE PARADISI (Linnæus).

Male, adult, Lolab, Kashmir, July 9, 1891.

Male, adult, Vale of Kashmir, August 8, 1891.

Adult, Vale of Kashmir, May, 1892. Three specimens.

Family HIRUNDINIDÆ.

140. HIRUNDO URBICA, Linnæus.

Female, adult, Kharbu, Kashmir, June 26, 1893; 12,000 feet. "Bill black; length,  $5\frac{5}{8}$  inches."

Male, adult, Indus Valley, Ladak, June 28, 1893; 10,000 feet. "Bill black; irides brown; claws pale brown; length,  $5\frac{1}{2}$  inches. Common along the Indus."

141. HIRUNDO CASHMERIENSIS (Gould).

Female, adult, Atchibal, Vale of Kashmir, May 26, 1892.

142. PTYONOPROGNE RUPESTRIS (Scopoli).

Male, adult, Khartaksho, Indus Valley, Baltistan, March 23, 1892; 8,000 feet. "Bill horn black; feet pale brownish flesh; irides dark brown; length,  $5\frac{3}{8}$  inches."

Female, adult, Khartaksho, Indus Valley, Baltistan, March 23, 1892; 8,000 feet. "Bill horn black; feet pale fleshy brown; irides dark brown; length,  $5\frac{7}{8}$  inches."

Female, adult, Dras Valley, Kashmir, June 21, 1893; 10,000 feet. "Bill black; feet flesh color; length,  $6\frac{1}{2}$  inches."

143. CHELIDON RUSTICA (Linnæus).

Male, adult, Vale of Kashmir, August 9, 1891.

Female, immature, Vale of Kashmir, August 4, 1891.

Male, adult, Vale of Kashmir, August 9, 1891.

Male, immature, Vale of Kashmir, August 9, 1891.

Male, immature, Vale of Kashmir, August 24, 1891.

Female, adult, Gunderbal, Vale of Kashmir, April 2, 1892. "Bill and feet black; irides brown; length,  $7\frac{1}{2}$  inches."

Male, adult, Gunderbal, Vale of Kashmir, April 2, 1892. "Bill and feet black; irides brown; length,  $7\frac{1}{4}$  inches."

Male, adult, Vale of Kashmir, May, 1892.

Female, adult, Srinagar, Kashmir, April 3, 1892. "Bill and feet black; irides dark brown; length,  $7\frac{1}{4}$  inches."

144. CHELIDON ERYTHROPYGIA (Sykes).

Male, adult, Vale of Kashmir, May 18, 1893; 6,000 feet. "Bill black; feet dark fleshy brown; irides dark brown; length,  $7\frac{1}{2}$  inches."

Female, adult, Vale of Kashmir, May 18, 1893; 6,000 feet. "Bill black; feet dark fleshy brown; irides dark brown; length,  $6\frac{7}{8}$  inches."

Family PICIDÆ.

145. GECINUS SQUAMATUS (Vigors).

Male, adult, Lolab Valley, Kashmir, July 12, 1891.

Male, adult, Haramosh, Baltistan, February 22, 1892; 6,000 feet. "Bill yellow, base of culmen horn color; feet greenish leaden; irides carmine, with a paler circle; length, 14; extent,  $20\frac{3}{4}$  inches. Only one pair observed. Kashmir name *Kūl kā kūr* (literally, tree popper)."

146. DRYOBATES HIMALAYENSIS (Jardine and Selby).

Female, immature, western Kashmir, July 6, 1891; 8,000 feet.

Male, immature, western Kashmir, July 7, 1891; 8,000 feet.

Male, western Kashmir, July 7, 1891; 8,000 feet.

Male, adult, Lolab, Kashmir, July 10, 1891.

Female, immature, central Kashmir, August 2, 1891; 9,000 feet.

Immature, central Kashmir, August 2, 1891; 9,000 feet.

Female, immature, Vale of Kashmir, August 12, 1891.

Female, adult, Nowboog Valley, eastern Kashmir, August 15, 1891; 7,000 feet.

Male, adult, Pir Panjal range, Kashmir, August 27, 1891; 8,000 feet.

Female, adult, Haramosh, Baltistan, February 13, 1892; 9,000 feet. "Bill black, base of lower mandible slaty; feet slaty; length, 9 $\frac{3}{8}$  inches. Only specimen observed in this region."

The specimens marked immature females, all have red crowns, like the immature males, but in one of them the crown is almost black, only a few scattered red feathers being present.

147. *DRYOBATES AURICEPS* (Vigors).

Female, adult, Lolab Valley, Kashmir, July 12, 1891.

Female, adult, Lolab Valley, Kashmir, April 20, 1893. "Feet greenish slate; bill horn black."

148. *JYNX TORQUILLA*, Linnæus.

Female, adult, eastern Kashmir, August 15, 1891; 7,000 feet. "Bill brown; feet dark greenish flesh color; irides light orange brown."

Male, adult, Vale of Kashmir (western part), April 13, 1892. "Bill horn brown; feet slaty, with greenish tinge; length, 7 $\frac{5}{8}$  inches."

Male, adult, Vale of Kashmir, western part, April 13, 1892; 5,500 feet. "Bill horn brown; feet dirty yellow, claws brown; irides pale brown."

Male, adult, Vale of Kashmir, April 14, 1893. "Feet pale fleshy brown, with greenish tinge, claws horn color; bill horn color, dark at tip; irides pale brown; length, 7 $\frac{5}{8}$  inches."

Family UPUPIDÆ.

149. *UPUPA EPOPS*, Linnæus.

Male, adult, Vale of Kashmir, June 22, 1891.

Female, adult, Vale of Kashmir, August 10, 1891.

Female, adult, eastern Kashmir, August 18, 1891; 6,000 feet.

Family CUCULIDÆ.

150. *CUCULUS CANORUS TELEPHONUS* (Heine).

Male, immature, Vale of Kashmir, September 1, 1891. "Feet pale yellow; length, 13 $\frac{1}{4}$  inches. Extremely fat."

Female, immature, Vale of Kashmir, August 10, 1891. "Bill black; base of lower mandible yellowish green; irides pale brownish; feet yellow; length, 12 inches."

Male, adult, Vale of Kashmir, April 27, 1892; 6,000 feet. "Bill black; base of lower mandible greenish yellow; orbital skin orange; irides orange; length, 13 $\frac{1}{4}$  inches."

Male, adult, Vale of Kashmir, April 27, 1892; 6,000 feet. "Bill black; lower mandible greenish yellow at base; orbital skin orange; irides orange; feet bright yellow; length, 13 $\frac{3}{8}$  inches."

151. *CUCULUS POLIOCEPHALUS*, Latham.

Male, adult, Lolab Valley, Kashmir, May 15, 1893; 6,000 feet. "Bill black; base of lower mandible yellowish brown; orbital skin lemon yellow; irides brown; feet lemon yellow; length, 10 $\frac{7}{8}$  inches."

152. *COCCYSTES JACOBINUS* (Boddaert).

Female, adult, Vale of Kashmir, August 12, 1891. "Length, 12 $\frac{3}{8}$  inches."

Female, immature, Vale of Kashmir, August 13, 1891.

Male, adult, Vale of Kashmir, August 24, 1891. "Feet leaden blue; bill black; irides dark brown; length, 12 $\frac{1}{4}$  inches."

Male, immature, Vale of Kashmir, September 1, 1891. "Feet leaden blue; irides brown; upper mandible black; lower mandible yellowish brown."

Family *ALCEDINIDÆ*.153. *ALCEDO ISPIDA BENGALENSIS* (Gmelin).

Male, adult, Lolab, Kashmir, July 1, 1891.

Male, adult, Lolab, Kashmir, July 9, 1891.

Male, adult, Lolab, Kashmir, July 10, 1891.

Male, adult, Srinagar, Kashmir, August 4, 1891. "Length, 7 $\frac{1}{8}$  inches."

Adult, no data.

154. *CERYLE RUDIS VARIA* (Strickland).

Male, adult, Vale of Kashmir, August 13, 1891. Three specimens.

Female, adult, Vale of Kashmir, August 13, 1891.

Family *MICROPODIDÆ*.155. *MICROPUS APUS PEKINENSIS* (Swinhoe).

Female, adult, Vale of Kashmir, June 2, 1893. "Bill and claws black; feet dark fleshy brown; length, 7 inches."

Male, adult, Dras, Kashmir, June 22, 1893; 10,000 feet. "Bill black; length, 7 inches."

Family *CORACIDÆ*.156. *CORACIAS GARRULA*, Linnæus.

Male, adult, Vale of Kashmir, June 28, 1891.

Female, adult, Lolab, Kashmir, July 10, 1891; 6,000 feet.

Male, immature, eastern Kashmir, August 18, 1891; 6,000 feet.

Family *MEROPIDÆ*.157. *MEROPS APIASTER*, Linnæus.

Female, adult, Vale of Kashmir, August 9, 1891.

Male, adult, Vale of Kashmir, August 10, 1891. "Bill black; feet leaden; irides brown."

## Family PSITTACIDÆ.

158. *PALÆORNIS SCHISTICEPS*, Hodgson.

Male, immature, Lolab Valley, Kashmir, July 1, 1891.

Male, adult, Lolab Valley, Kashmir, July 10, 1891; 6,000 feet. "Upper mandible red, yellow at tip; lower mandible yellow; feet slate; irides white."

Male, adult, Lolab Valley, Kashmir, July 10, 1891.

Male, immature, Lolab Valley, Kashmir, July 12, 1891.

Male, adult, Vale of Kashmir, August 22, 1891; 6,000 feet. "Upper mandible red at base, yellow at tip, as is lower mandible; cere orange; irides yellowish white; feet dirty yellowish brown; length,  $19\frac{1}{4}$  inches."

Immature, Vale of Kashmir, August 23, 1891; 6,000 feet. "Bill yellow; feet greenish brown."

## Family COLUMBIDÆ.

159. *COLUMBA INTERMEDIA*, Strickland.

Male, adult, Dras Valley, Kashmir, November 9, 1891; 10,000 feet. "Irides orange; feet pinkish red; length, 14 inches."

Female, adult, Dras Valley, Kashmir, November 9, 1891; 10,000 feet. "Length, 13 inches."

Male, adult, Dras Valley, Kashmir, March 27, 1892; 9,000 feet. "Bill black; feet red; irides orange red; cere white; length,  $13\frac{3}{8}$  inches."

Male, adult, Dras, Kashmir, June 21, 1893; 10,000 feet. "Bill black; cere white; feet red, claws black; irides brownish yellow; length, 13 inches."

Female, adult, Haramosh, Baltistan, February 16, 1892; 5,500 feet. "Bill black; cere grayish white; feet red; irides yellowish brown; length,  $12\frac{7}{8}$  inches."

Male, adult, Haramosh, Baltistan, March 8, 1892; 7,000 feet. "Bill black; cere gray; feet dull pink; irides orange, paler near pupil; length,  $13\frac{3}{8}$  inches."

The female from Haramosh has the rump gray, similar to the back; the male, on the other hand, has a very pale gray rump, the lower part being almost white. The four Dras birds show considerable grayish white on the rump, the color being in rather marked contrast with the gray of the back.

160. *COLUMBA RUPESTRIS* (Pallas).

Male, adult, Braldu Valley, Baltistan, December 23, 1891; 10,000 feet. "Bill black; feet dull red; irides orange; length,  $13\frac{1}{4}$  inches."

Male, adult, Namika-la Pass, Kashmir, June 26, 1893; 12,000 feet. "Bill black; cere white; irides red; feet pink, claws black; length,  $13\frac{1}{4}$  inches."



## 161. COLUMBA LEUCONOTA, Vigors.

Male, adult, Braldn Valley, Baltistan, December 23, 1891; 10,000 feet. "Bill black; cere dusty gray; feet bright red; irides yellow; length,  $13\frac{3}{4}$  inches."

## 162. TURTUR FERRAGO (Eversmann).

Female, adult, Vale of Kashmir, August 23, 1891; 6,000 feet. "Bill black at tip, dusky purple at base; feet dark purple; irides orange; length,  $12\frac{3}{8}$  inches."

Male, adult, Vale of Kashmir, September 1, 1891. "Feet dull purple; irides orange; bill dull purple at base, leaden blue at tip."

Male, immature, central Kashmir, September 12, 1891. "Feet dull purple; base of bill dusky purple, tip dull leaden blue; irides orange; length,  $13\frac{1}{4}$  inches."

Male, adult, Pir Panjal range, Kashmir, August 29, 1891; 9,000 feet. "Length,  $12\frac{3}{4}$  inches."

## 163. TURTUR DOURACA, Hodgson.

Male, adult, Vale of Kashmir, August 12, 1891. "Feet dark purple; irides red."

Male, adult, Vale of Kashmir, August 12, 1891. "Feet purple; irides red."

Male, adult, Vale of Kashmir, August 24, 1891. "Feet dull purple; bill black."

Male, adult, Vale of Kashmir, August 10, 1891.

## 164. TURTUR HUMILIS (Temminck).

Male, adult, Vale of Kashmir, June 25, 1891.

## Family PHASIANIDÆ.

## 165. TETRAOGALLUS HIMALAYANUS, Gray.

Female, immature, central Kashmir, September 30, 1891; 11,000 feet. "Naked skin behind eye yellow; front of tarsus and top of toes orange brown, rest of feet dull brown; irides light brown; length,  $22\frac{1}{2}$  inches; weight,  $3\frac{3}{4}$  pounds."

## 166. CACCABIS SAXATILIS CHUCAR (Gray).

Male, adult, central Kashmir, September 21, 1891; 11,000 feet. "Bill vermilion; feet dull red; length,  $13\frac{1}{4}$  inches; weight, 20 ounces."

Female, adult, central Kashmir, October 1, 1893; 11,000 feet. "Bill dark red; feet red; irides pale brown; length,  $13\frac{1}{2}$  inches; weight, 14 ounces."

Male, adult, Round, Baltistan, February 4, 1892; 6,000 feet. "Bill red; feet red; irides brown; length,  $14\frac{5}{8}$  inches; weight, 20 ounces."

Male, adult, Haramosh, Baltistan, March 8, 1892; 7,000 feet. "Bill and feet red; irides clear brown; length, 14 inches; weight, 17 ounces."

Male, adult, Leh, Ladak, July 1, 1893; 11,000 feet. "Bill dark red; irides brown."

The Ladak specimen is somewhat lighter than the rest of the series, but this is due in part to the worn condition of its plumage. I presume this individual represents the form described by Hume and Henderson as *Caccabis pallescens*.

167. LOPHOPHORUS REFULGENS, Temminck

Male, adult, central Kashmir, October 16, 1891; 9,000 feet. "Length, 28½ inches; weight, 6½ pounds; feet greenish brown; bill dark brown, paler below and along gape."

Female, adult, central Kashmir, October 15, 1891; 9,000 feet. "Irides brownish gray; feet greenish; length, 24 inches; weight, 3½ pounds."

Family ARDEIDÆ.

168. ARDETTA MINUTA (Linnæus).

Male, adult, Dal Lake, Vale of Kashmir, May 25, 1893. "Feet and legs pale green; claws horn brown; bill horn black above, greenish yellow beneath; irides brownish yellow; length, 14¾ inches."

Female, adult, Dal Lake, Vale of Kashmir, May 25, 1893. "Feet and legs green; bill brownish horn above, brownish yellow beneath; irides brownish yellow; length, 13¾ inches."

Female, adult, Dal Lake, Vale of Kashmir, May 25, 1893. "Bill horn black above, greenish yellow beneath; feet green; irides brownish yellow; length, 15 inches."

169. NYCTICORAX NYCTICORAX (Linnæus).

Male, adult, Vale of Kashmir, June 3, 1893.

Family ANATIDÆ.

170. ANAS BOSCHAS, Linnæus.

Male, Braldn Valley, Baltistan, December 6, 1891.

171. ANAS CRECCA, Linnæus.

Male, adult, Vale of Kashmir, winter of 1891-92.

Female, adult, Shigar Valley, Baltistan, November 22, 1891; 8,000 feet. "Length, 14¾ inches."

172. NYROCA NYROCA (Güldenstadt).

Female, adult, Vale of Kashmir, May 27, 1893. "Bill, feet, and legs leaden; webs black; irides dirty gray; length, 16¼ inches."

## Family LARIDÆ.

## 173. LARUS RIDIBUNDUS, Linnæus.

Female, adult, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet. "Bill red; feet dull red."

Female, immature, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet. "Feet brownish flesh color."

Female, immature, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet. "Feet brownish yellow."

## 174. HYDROCHELIDON LEUCOPAREIA (Temminck).

Male, adult, Woolar Lake, Kashmir, August 4, 1891. "Bill and feet dark carmine; length, 10½ inches."

Female, adult, Woolar Lake, Kashmir, August 4, 1891.

Male, immature, Vale of Kashmir, September 4, 1891.

## Family JACANIDÆ.

## 175. HYDROPHASIANUS CHIRURGUS (Scopoli).

Male, adult, Woolar Lake, Vale of Kashmir, June 23, 1891.

Male, adult, Woolar Lake, Vale of Kashmir, June 23, 1891.

Female, adult, Woolar Lake, Vale of Kashmir, June 23, 1891. "Female is much the larger of the sexes."

Male, adult, Woolar Lake, Vale of Kashmir, August 4, 1891.

Female, adult, Woolar Lake, Vale of Kashmir, August 4, 1891. "Bill and feet pale leaden blue; irides dark brown; length, 21¾ inches."

Female, immature, Woolar Lake, Vale of Kashmir, October 27, 1891; 5,000 feet.

## Family CHARADRIIDÆ.

## 176. ÆGIALITIS DUBIA (Scopoli).

Male, immature, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet.

## 177. ÆGIALITIS DUBIA JERDONI (Legge).

Male, adult, Vale of Kashmir, April 12, 1892; 5,200 feet. "Bill black, yellow at base; feet slaty; irides very dark brown; length, 6½ inches."

The wing of this specimen measures 3.90 inches.

## 178. VANELLUS VANELLUS (Linnæus).

Male, immature, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet. "Feet brown."

Male, immature, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet.

179. *SARCOGRAMMUS INDICUS* (Boddert).

Male, adult, Vale of Kashmir, September 1, 1891. "Feet yellow; base of bill and cere dark crimson, tip of bill black; irides reddish brown."

## Family SCOLOPACIDÆ.

180. *CALIDRIS ARENARIA* (Linnæus).

Female, adult, Woolar Lake, Kashmir, October 27, 1891; 5,000 feet.

181. *TOTANUS OCHROPUS* (Linnæus).

Female, adult, Vale of Kashmir, August 13, 1891.

Male, immature, Woolar Lake, Kashmir, October 26, 1891; 5,000 feet.

Male, immature, Woolar Lake, Kashmir, October 26, 1891; 5,000 feet.

"Feet greenish slate color."

Male, immature, Woolar Lake, Kashmir, October 28, 1891; 5,000 feet.

"Bill greenish at base, becoming black at tip; feet greenish; length, 9¼ inches. Very common."

182. *ACTITIS HYPOLEUCOS* (Linnæus).

Female, adult, Nowboog Valley, eastern Kashmir, May 30, 1892; 6,500 feet. "Bill brown, black at tip; feet greenish slate; irides dark brown; length, 8½ inches."

183. *ROSTRATULA BENGHALENSIS* (Linnæus).

Female, adult, Vale of Kashmir, May 27, 1893. "Feet and legs leaden, with greenish tinge; bill dull reddish, olivaceous near base; claws brown; length, 9¾ inches. Contained a mature egg."

## Family RALLIDÆ.

184. *FULICA ATRA*, Linnæus.

Female, adult, Woolar Lake, Kashmir, April 11, 1892. "Feet pale leaden, soles dark leaden; irides blood red; bill and frontal plate white; length, 15¾ inches."

185. *GALLINULA CHLOROPUS* (Linnæus).

Adult, Vale of Kashmir, May, 1892.

Female, adult, Vale of Kashmir, June 3, 1893. "Feet and legs green; bill and frontal plate red, point of bill greenish yellow; irides brown; length, 12½ inches."

186. *AMAURORNIS AKQOL* (Sykes).

Male, young, Vale of Kashmir, September 5, 1891.

This specimen is very young, just leaving the downy stage, and I have some slight misgivings about the correctness of the identification.

The back is uniform rich brown (between bistre and vandyke brown); lower throat, lores, and ear coverts gray (between drab and smoke gray); middle of breast pale buff, passing laterally into deep wood brown, this color much deeper on flanks; median line of abdomen white; sides of abdomen and thighs drab gray; throat and chin white, mingled with black down. All of these color patches are sharply defined, and narrowly separated from each other by lines of the black down which had evidently a short time previously covered the bird. Tarsus, 1.52 inches; culmen, 0.89.

187. *LIMNOBÆNUS FUSCUS*, (Linnæus).

Female, adult, Vale of Kashmir, May 30, 1893. "Bill black above, greenish beneath; legs and feet vermilion, claws horny brown; irides red; orbital skin red; length,  $7\frac{1}{4}$  inches."

Family PODICIPIDÆ.

188. *COLYMBUS FLUVIATILIS*, Tunstall.

Male, adult, Vale of Kashmir, April 8, 1893. "Bill black, tip white; bare skin at base of bill and gular patch pale green; outsides of feet and soles black; inner sides of tarsi and tip of toes greenish slate; irides brownish green; length, 10 inches."

Female, adult, Vale of Kashmir, June 2, 1893. "Feet greenish slate; bill black; skin at base of lower mandible pale yellowish green; irides yellowish brown."